

ASSESSMENT OF AWARENESS AND PREVALENCE OF ORAL CONTRACEPTIVE PILLS SIDE EFFECT AMONG SAUDI FEMALE SOCIETY: A CROSS SECTIONAL STUDY

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ABSTRACT

Introduction: Oral contraceptive pills (OCPs) is the most commonly prescribed form of contraception in the US, and is highly effective when used perfectly.^[1] OCPs contain combinations of female hormones estrogen and progestin or progestin alone.^[2] OCPs may cause some adverse effects. For example nausea, mood and weight changes, breast tenderness, headaches, and breakthrough bleeding.

Objective: The main objective of this study is to assess level of awareness and prevalence of OCPs side effect among Saudi women.

Method: A cross sectional study (Questionnaire) was conducted in Saudi Arabia. The questionnaire was published between Saudi women through social media. The questionnaire contained a total of 13

questions, 4 of them were demographics. While the other 9 questions related to assessing the Awareness and prevalence. **Result:** One hundred and ninety-nine women participated in this study. All the respondents completed the questionnaire. Most participants aged between 30 to 40 years old 36.65%, the level of education for most of them was University graduate from Health College 47%, the social status most of them were married 91.10%, and most respondents were from Eastern Province 87.43%. For the second section, 75% of the women do not know about the type of the OCPs used. The primary used of OCPs for most of them is to prevent pregnancy 81.15%. Most of them use it after physician consultation 43%, and most of them read the patient information leaflets which comes with the medicine 75%. Most of the participants use OCPs for more than three years 33%. Regarding to the safety of OCPs most of them think it have side effect 96%. About the Prevalence of OCPs side effect, mood

change is the most commonly reported side effect between Saudi women 82%. Most of participants know how to deal with side effect of OCPs by continue taking the medicine 55%.

Conclusion: According to study results, Saudi women have adequate knowledge about OCPs. However, they have limited information about the type of the OCPs used. The most common side effect reported was mood change and most of the participants knew how to deal with it.

KEYWORDS: OCPs, contraception, side effect, female hormones, estrogen, progestin.

INTRODUCTION

Oral contraceptive pills (OCPs) is the most commonly prescribed form of contraception in the US, and is highly effective when used perfectly. Approximately 25% of women in US use the OCPs.^[1] OCPs contain combinations of female hormones estrogen and progestin or progestin alone.^[2]

Estrogen and progestin act by blocking ovulation. It will also affect the endometrial lining and increase the thickness of mucus in the cervix to prevent sperm penetration.^[3-4]

The primary use of OCPs is to prevent pregnancy; also, it can be used for irregular or heavy periods, painful periods, polycystic ovarian syndrome, acne, uterine fibroids, and endometriosis.^[2]

OCPs may cause some adverse effects. For example nausea, breast tenderness, headaches, mood and weight changes which typically improve within two to three months without treatment. Additionally, breakthrough bleeding may happen during the first few months of taking OCPs. This usually resolves without any treatment within three months.^[4-5]

The side effects of OCPs vary depending on the pills' hormone levels and types, and it is the most cause of the women to discontinue using the OCPs.^[2-6]

Objective

The main objective of this study is to assess awareness and prevalence of OCPs side effect among Saudi women.

Method

A cross sectional study (Questionnaire) was conducted in Saudi Arabia. It was carried out between April 2018 and May 2018. The questionnaire was published between Saudi women through social media. One hundred and ninety-nine responses were collected from Saudi women.

The electronic questionnaire is used to collect the data were divided into three main sections

The first section: Population demographic data includes age, social status, educational level, and region.

Section 2: Evaluates the awareness of the participants and there general information about OCPs.

Section 3: Prevalence of OCPs side effect among Saudi female society.

RESULTS

Demographics

One hundred and ninety-nine women participate in this study. All the respondents completed the questionnaire. Of these participants, most of them were between ages 30 to 40 years (36.65%). More than 92% of participants were married. Most of participants 47% have Health care specility, 22% of them have University degree, 20.42% have Secondary education, 6.81% have Intermediate education and the remaining 2.62% have elementary education. Most respondents were from Eastern Province (87%). (Table.1).

Table 1: Demographic data of participants, (N =191).

Variable	The ratio (%)
Age	
Less than 20 years	1.05%
20 to 30 years	32.46%
30 to 40 years	36.65%
More than 40 years	29.32%
Level of education	
Elementary	2.62%
Intermediate	6.81%
Secondary	20.42%
University	22.1%
University Health care specialty	47.12%
Social Situation	

Single	4.19%
Married	91.10%
Divorced	3.14%
Widow	1.57%
Region	
Eastern Province	87.43%
Western Province	0%
Central Province	10.99%
Northern Province	1.05%
Southern Province	0.52%

Questionnaire Items

For the second section, 75% of the participants do not know about the type of the OCPs used. Sixteen percent of the participants used combinations pill (containing progestin and estrogen hormones) and 9% used mini pill (containing progestin only) (Figure.1). Most of the participant used OCPs to prevent pregnancy 81.15%, were 11.52% to regulate the menstrual cycle, 3.66% to prevent pregnancy and regulate the menstrual cycle, 2.09% to regulate the menstrual cycle and polycystic ovary syndrome, 1,05% for polycystic ovary syndrome and 0.52 for acne treatment (Figure.2). From figure (3), the higher percentage which is take OCPs after physician consultation 43%, were 27% after family member consultation, 9% after husband consultation, 8% after friend's consultation, 7% by them self, 4% after pharmacist consultation and 2% of them receive it after internet consultation.

Most of the participants use OCPs for more than three years 33%, 31% for less than one year, 15% for two years, 11% for one year, and 10% for three years (Figure.4). The majority of participants 75% read patient information leaflets, which come with the medicine, while (25%) did not read it (Figure.5). Regarding to the safety of OCPs, 96% of the participants think it have side effect and 4% think it have not side effect (Figure.6).

Regarding to the Prevalence of OCPs side effect among Saudi female society, 27% of the participants have irregular bleeding during the use of OCPs, where 73% of the participants have not. 43% of the participants have Increase in weight, where 57% of the participants have not. 12% of the participants have weight loss, where 88% of the participants have not. 40% of the participants have Nausea, where 60% of the participants have not. 59% of the participants have Headache, where 41% of the participants have not. 34% of the participants have Changes in breast (Tender or sore), 66% of the participants have not. 82% of the participants have Mood changes; where 18% of the participants have not. (Figure.7) (Table.2). We note

that most of participants know how to deal with side effect of OCPs by continue taking the medicine 55%. (Figure.8).

Table 2: Prevalence of OCPs side effect among Saudi female society.

Variable	The ratio (%)
Irregular bleeding	
Yes	27%
No	73%
Increase in weight	
Yes	43%
No	57%
weight loss	
Yes	12%
No	88%
Nausea	
Yes	40%
No	60%
Headache	
Yes	59%
No	41%
Changes in breast (Tender or sore)	
Yes	34%
No	66%
Mood changes	
Yes	82%
No	18%

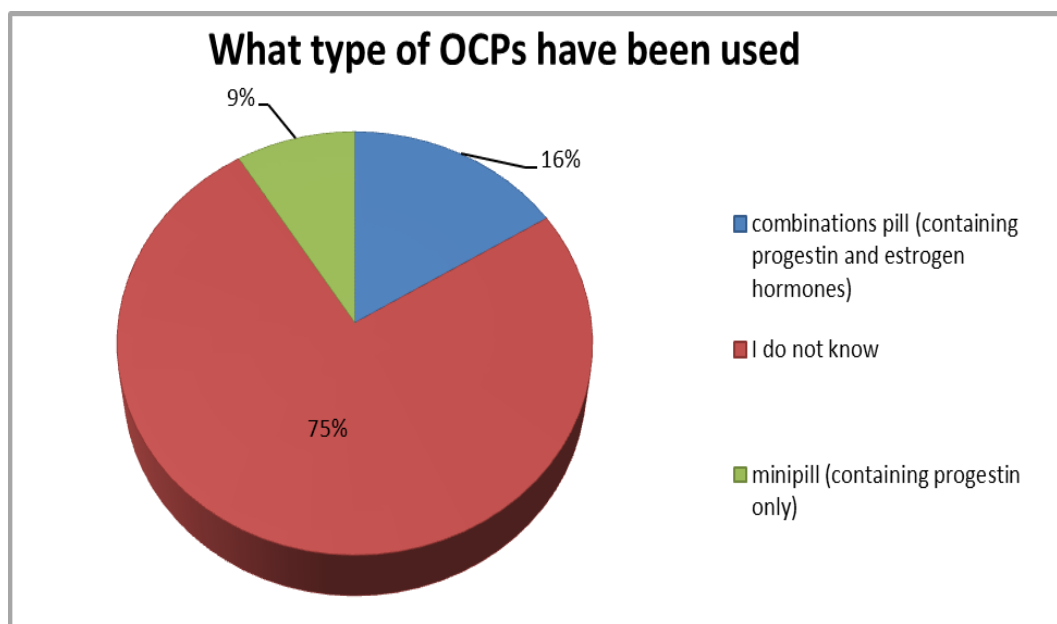


Figure (1):

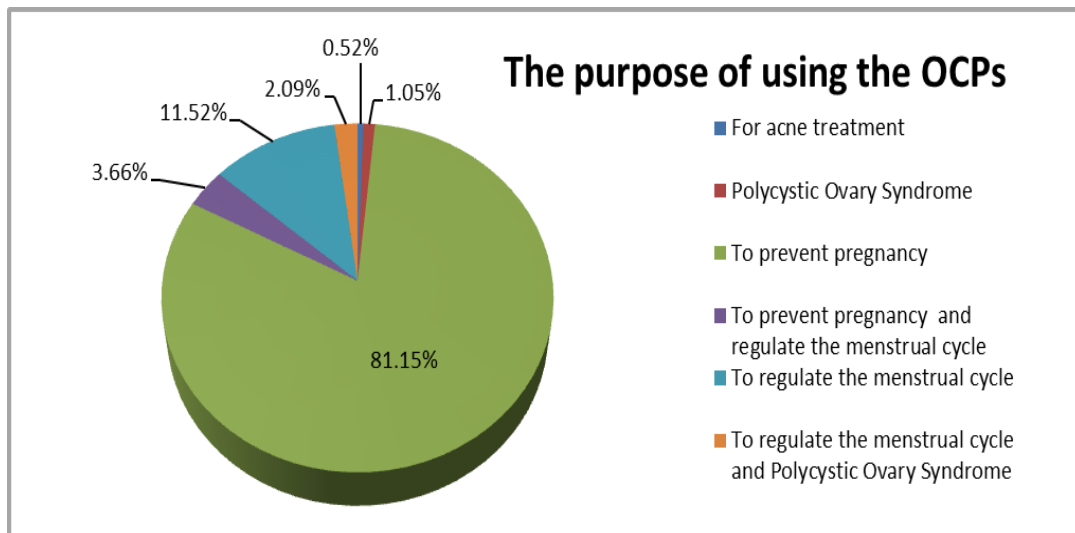


Figure (2):

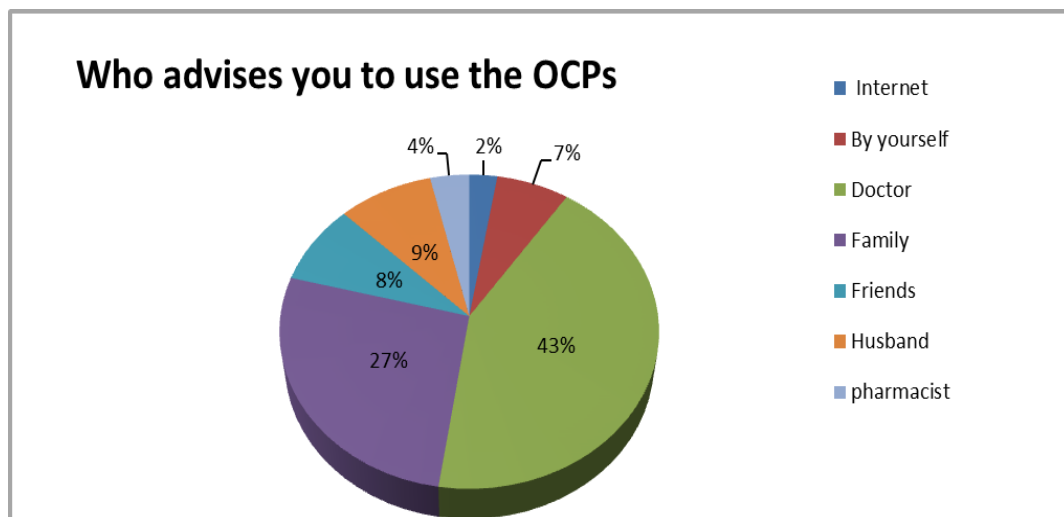


Figure (3):

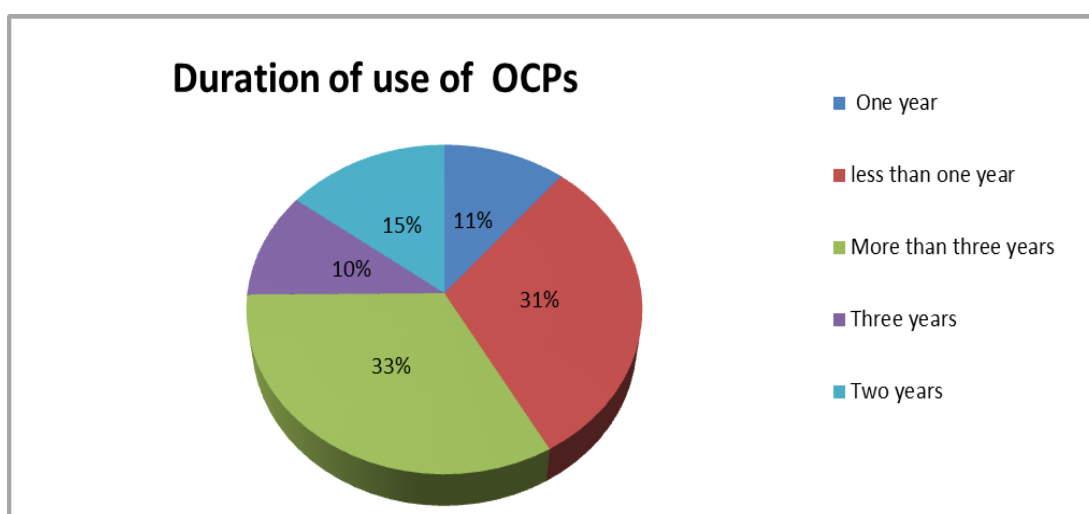


Figure (4):

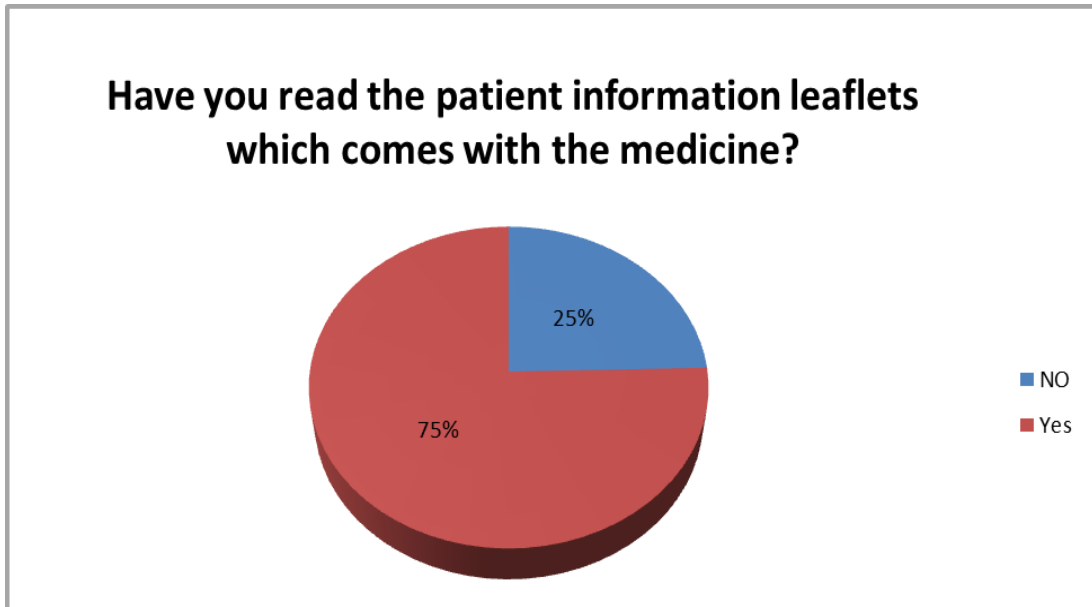


Figure (5):

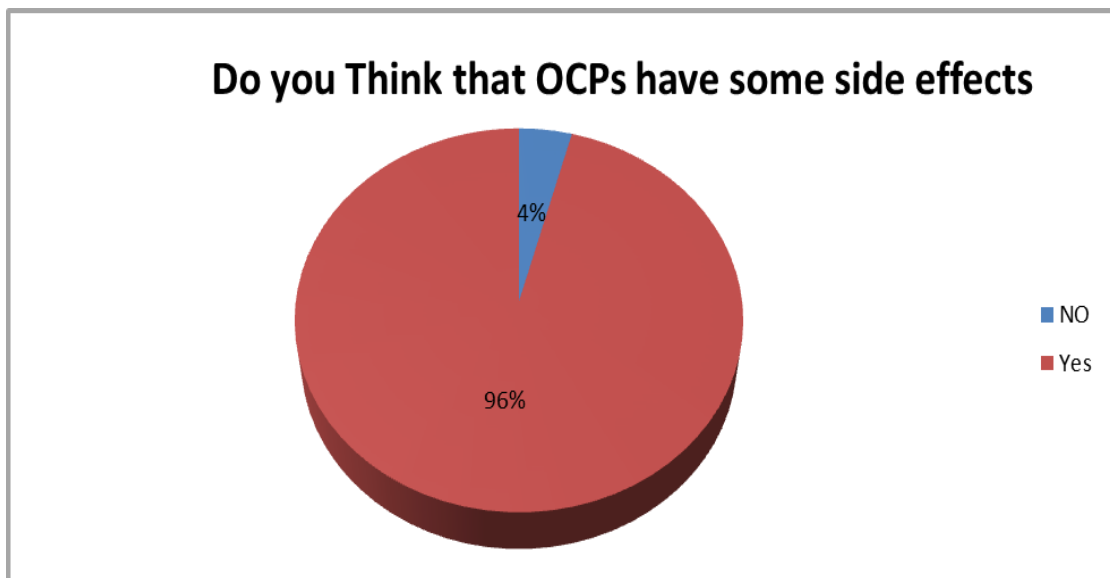


Figure (6):

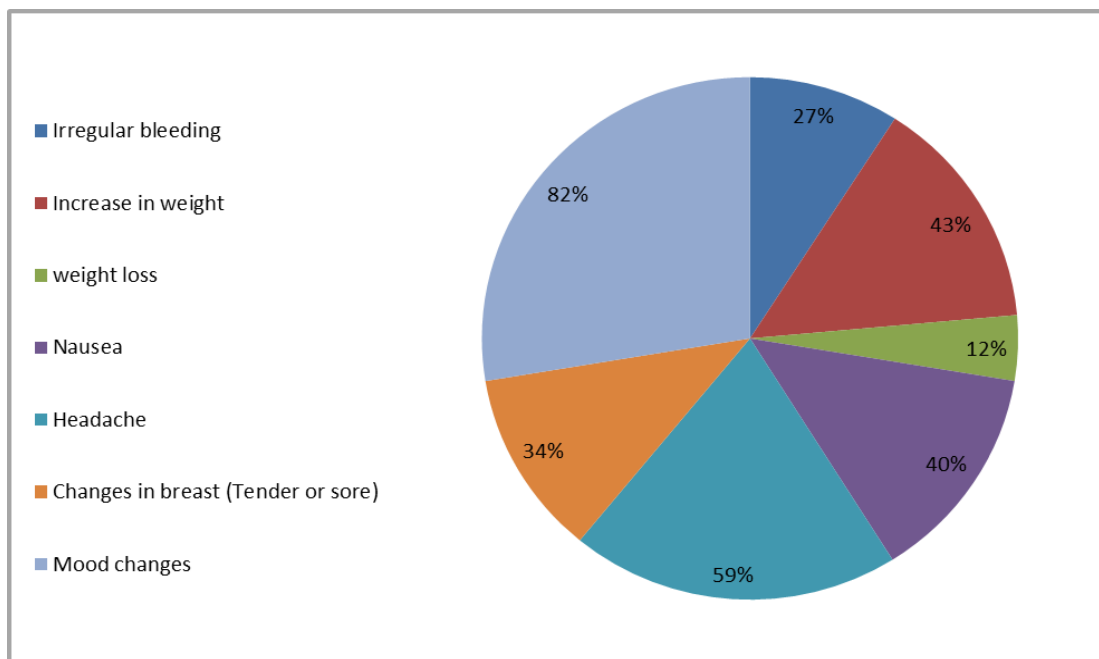


Figure (7): Side effects encountered by women using oral contraceptives.

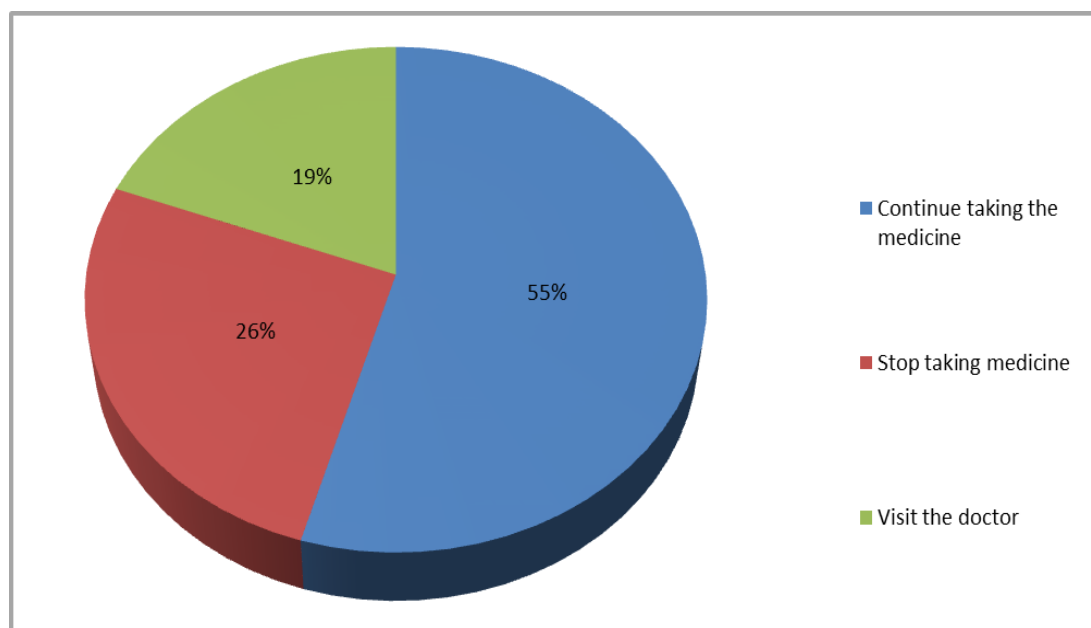


Figure (8): How to deal with side effect of OCPs.

DISCUSSION

Regarding to the demographic data, most participants aged between 30 to 40 years old, the level of education for most of them was University graduate from Health College, the social status most of them were married, and most respondents were from Eastern Province.

Most of the women did not know about the type of the OCPs used, even though using of combination of OCPs will increase the risk of different complications like CVDs than

progestin alone. Therefore, for women with multiple cardiovascular risk factors the use of progestin -only contraceptives should be considered.^[3-7] The primary used of OCPs for most of them is to prevent pregnancy. Most of them use it after physician consultation in the other hand some of them receive it after pharmacist and family member's consultation, and most of them read the patient information leaflets, which comes with the medicine, which it is reflect high participant's awareness regarding to the OCPs use.

Most of the participants use OCPs for more than three years. In 2017, prospective study reported that, the risk of breast cancer increased with longer used of oral contraceptives. and also, in other study reported that, women who have used oral contraceptives for 5 years or more will have a higher risk of cervical cancer than women who have never used oral contraceptives.^[8-9]

Regarding to the safety of OCPs most of them think it have side effect. About the Prevalence of OCPs side effect mood change is the most commonly reported side effect between Saudi women. In face-to-face questionnaire study between Jordanian women reported side effects were headache (41.2%), mood swings (35.5%), and weight gain (28.7%). and in cross-sectional prospective study in Riyadh, Saudi Arabia reported that, the most common side effects were weight gain.^[10-11] Most of participants know that, they should continue taking the medicine and the most of side effects would disappear.

CONCLUSION

According to our study results, Saudi women have adequate knowledge about OCPs. However, they have limited information about the type of the OCPs used.

The most common side effect were mood change also most of the participants knew how to deal with it.

Recommendations

We recommend organizing educational campaign to increase the knowledge of female about the type of the OCPs used.

Limitations

- This study has a small sample size.

- Most of the participants from eastern region and the level of education for most of them was University graduate from Health College.

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APPENDIX.1

Questionnaire – English Version

▶ Age

- Less than 20 years
- 20 to 30 years
- 30 to 40 years
- More than 40 years

▶ Level of education

- Elementary
- Intermediate
- Secondary
- University
- University Health care specialty

▶ Social Situation

- Single
- Married
- Divorced

- Widow

- ▶ **Residence**
- Eastern Province
- Western Province
- Central Province
- Northern Province
- Southern Province

- ▶ **Did you use OCPs?**
- yes
- No

- ▶ **What types of OCPs have been used?**
- combinations pill (containing progestin and estrogen hormones)
- minipill (containing progestin only)
- I do not know

- ▶ **Who advises you to use the OCPs?**
- doctor
- pharmacist
- your friends
- family member
- By yourself
- Husband
- Internet

- ▶ **The purpose of using the OCPs?**
- to prevent pregnancy
- to regulate the menstrual cycle
- to prevent pregnancy and regulate the menstrual cycle
- to regulate the menstrual cycle and polycystic ovary syndrome
- for polycystic ovary syndrome
- for acne treatment

▶ Duration of use OCPs?

- for less than one year
- for one year
- for two years
- for three years
- for more than three years

▶ Have you read the patient information leaflets which comes with the medicine?

- yes
- No

▶ Do you Think that OCPs have some side effects

- yes
- No

▶ Did you notice any of the following symptoms during the use of OCPs**▶ Irregular bleeding**

- yes
- No

▶ Increase in weight

- yes
- No

▶ Weight loss

- yes
- No

▶ Nausea

- yes
- No

▶ Headache

- yes
- No

- ▶ **Changes in breast (Tender or sore)**
 - yes
 - No

- ▶ **Mood changes**
 - yes
 - No

- ▶ **How did you deal with side effect of OCPs?**
 - Visit the doctor
 - Stop taking medicine
 - Continue taking the medicine

APPENDIX. 2

Questionnaire – Arabic Version