

# Awareness and Use of Contraceptives in the Middle East

Abrar Abdulfattah Alyamani<sup>1\*</sup>, Hussain Fuad Alsaffar<sup>2</sup>, Rawan Ezzi Abufaia<sup>3</sup>, Mansour Abdulqader Basamad<sup>4</sup>, Sakinah Hassan Alzaher<sup>5</sup>, Rawaby Saud Almatrafi<sup>6</sup>, Rana Abdullah Rukun<sup>7</sup>, Haifa Saud Alkheledan<sup>8</sup>, Adel Ali Alsaab<sup>9</sup>, Rania Rajallah Aljohani<sup>10</sup>, Abrar Farouq Felemban<sup>10</sup> and Tala Wajdi Jowharji<sup>11</sup>

 $^1$ Consultant Family Medicine, Obhur Primary Health Care Center, King Abdullah Medical Complex, Jeddah, Saudi Arabia

\*Corresponding Author: Abrar Abdulfattah AlYamani, Consultant Family Medicine, Obhur Primary Health Care Center, King Abdullah Medical Complex, Jeddah, Saudi Arabia.

Received: November 29, 2019; Published: December 06, 2019

#### **Abstract**

**Introduction:** Because of the political instability in the area, the rapidly growing population of the middle east is of particular importance because of its serious effects on employment, access to health-care services, and the cost of government subsidies. In developing countries, family planning has been advocated highly as a means to control the fast-growing population Contraception is a major component of family planning as well as reproductive health. Identifying the discrepancies in the awareness and use of contraceptives can help health policymakers and physicians understand the situation more clearly, enabling them to respond accordingly.

Aim of Work: The study aimed to identify the awareness and use of middle eastern women regarding the use of contraceptives.

Methodology: The review is comprehensive research of PUBMED since the year 1989 to 2019.

**Conclusion:** It was found that the average percentage of females between 15 - 49 years of age in the middle eastern countries that use contraception is around 50.92%. This is well below the global average of 64%. This highlights the Unmet need for Awareness and Implementation of Family Planning Programs in the Middle Eastern countries.

Keywords: Contraceptives; Family Planning; Middle East

# Introduction

Contraception (birth control) means the deliberate use of artificial methods or other techniques to prevent pregnancy as a consequence of sexual intercourse; this is done by interfering with the normal biological processes of ovulation, fertilization, or implantation. There are different kinds of birth control practices that stop the process of pregnancy at different stages [2].

<sup>&</sup>lt;sup>2</sup>Ras Tanura and Safwa Primary Health Care Center, Ras Tanura, Saudi Arabia

<sup>&</sup>lt;sup>3</sup>Asfan Primary Health Care Center, Asfan, Saudi Arabia

<sup>&</sup>lt;sup>4</sup>Umm Al-Qura University, Mecca, Saudi Arabia

<sup>&</sup>lt;sup>5</sup>Almatar Primary Health Care Center, Bugaya, Saudi Arabia

<sup>&</sup>lt;sup>6</sup>Jordan University of Science and Technology, Jordan

<sup>&</sup>lt;sup>7</sup>Alhamraa Primary Care Center, Jeddah, Saudi Arabia

<sup>&</sup>lt;sup>8</sup>King Saud Medical City Hospital, Riyadh, Saudi Arabia

<sup>&</sup>lt;sup>9</sup>King Abdulaziz University, Jeddah, Saudi Arabia

<sup>&</sup>lt;sup>10</sup>Indiana University of Pennsylvania (IUP), USA

<sup>&</sup>lt;sup>11</sup>King Abdualaziz Oncology Center, Jeddah, Saudi Arabia

Contraception has become an essential part of women's healthcare. It is an important means to prevent unintended pregnancies and to achieve family planning using effective and safe methods. The past decade has seen a notable increase in the use of contraceptives in developing countries. These changes have been associated with a reduced number of unintended pregnancies, and therefore, a reduction in the maternal mortality rate by approximately 40% and also reduce child deaths [1]. World Health Organization has identified Birth Spacing as one of the six essential health interventions required for safe motherhood [4].

In developing countries, family planning has been advocated highly as a means to control the fast-growing population. A distinguishing feature of the Middle Eastern population is their desire to have large families. They have high birth rates and a high total fertility rate relative to those of developed countries [18]. Studies indicate that the total fertility rate of a nation is inversely related to the prevalence rate of contraceptive use, and a high fertility rate has been linked with underdevelopment in developing countries [19].

Contraception also has the additional benefit of improving perinatal outcomes and child rates [1]. Contraceptive agents have been known to have multiple no contraceptive health benefits as well as therapeutic uses like treating polycystic ovarian syndrome (PCOS), regulation of the menstrual cycle, reducing the risk of gynecological malignancies, and decreasing the chances of sexually transmitted diseases [2].

According to studies performed in different parts of the world, the overall knowledge of contraception is more compared to their actual use. It has been found that, worldwide, more than 50% of women have good knowledge and usage of different contraceptive options Identifying the discrepancies in the awareness and use of contraceptives can help health policymakers and physicians understand the situation more clearly, enabling them to respond accordingly [6].

# **Methods of contraception**

Contraception can be achieved through several methods:

- a. Modern [barrier methods such as male and female condoms, diaphragm, cervical cap, and the sponge; hormonal contraceptives that include oral, injectable, transdermal, vaginal ring, and implants; intrauterine device (IUD)].
- b. Traditional [rhythm method (periodic abstinence), fertility awareness-based methods, withdrawal (coitus interruptus), the lactational amenorrhoea method, and folk methods].
- c. Emergency contraception.
- d. Permanent methods like female sterilization and vasectomy for men [20].

Oral Contraceptive Pills, transdermal patches, and vaginal rings containing Estrogen and Progesterone (COCs) have been found to be the most effective method of modern contraception. With correct usage, it prevents pregnancy in 99% of the cases. This is the most commonly used method [5].

The second most commonly used method is Progesterone-only contraception, which contains only progesterone in different forms. It has a success rate of 99% with correct and consistent use. It is available as pills, intrauterine systems, injections, and subdermal implants. Female condoms have been found to be 90% effective with correct usage. Traditional methods are the oldest methods of family planning. There are several types: rhythm method (periodic abstinence), fertility awareness-based methods, withdrawal (coitus interruptus), the lactational amenorrhoea method and folk methods. Periodic abstinence and Withdrawal are the most commonly used methods. Withdrawal has been found to 96% effective with correct and consistent use followed by Calendar method with 91% effectiveness (WHO) [5].

A few side effects are common with contraceptive use, especially the hormonal methods, but in the end the health benefits are shown to outweigh the risks of their use [3].

#### Awareness about contraceptives in the middle eastern countries

Awareness can be defined as the "state or condition of having knowledge with consciousness". Contraception (birth control) means "the deliberate use of artificial methods or other techniques to prevent pregnancy as a consequence of sexual intercourse with the normal process of ovulation, fertilization, or implantation. Awareness of Contraception can, therefore, be described as the state of being aware of the various methods of contraception, their uses, and side effects [6].

According to studies performed in different parts of the world, the overall knowledge of contraception been found to be more than 50% among women [6]. Contraception awareness and use in the various Middle Eastern countries are influenced by a number of factors including religious beliefs and social traditions. There was also found to be a significant association between using birth control and age, high level of education, and low family income of the women [13].

According to a study conducted among women in the Hail region of Saudi Arabia [5], where 500 women were questioned, 93%, i.e. 465 out of the 500 women were aware of the various methods of contraception. Only 7%, i.e. 35 women, claimed to have no knowledge about contraception. 276 (55.2%) thought they had sufficient information about contraception. 138(27.6%) acquired information from social media, 153(30%) from a doctor and, 152(30%) acquired from relatives [5]. Analysis of another study of Saudi Women in done Jeddah region of Saudi Arabia showed that the prevalence of contraceptive use women living in that region was 67.7%, variations in the length of use was seen among those who used contraceptives, 22% used contraception for less than a year, 32.7% used them for between 2 and 5 years, and 13.1% claimed to have used contraceptives for > 5 years. Preventing Pregnancy was found to be the most frequent reason using contraception (69.7%), followed by medical issues at 20.1% [8].

In a study conducted among Kuwait women, it was found that about 52% of Kuwaiti women were current users of some form of contraception, and 79% had used it at some time in their life (ever-use). 75% of the users reported using a modern method of contraception at the time of the survey. Of the modern methods used, Oral contraceptive pills were found to be the most commonly used followed by IUDs. Around 24% of the women reported using the traditional methods of contraception [10].

A study conducted among rural and urban women in Baghdad, Iraq, in 2017 found that Iraqi women were well aware of the concept of contraception. All of the women (100%) in the study were familiar with the concept of contraceptive and had a vast majority of them (96%) were currently using a contraceptive method. The most widely used method of contraception was Oral Pills with 42% users, followed by IUDs with 32% users and male condoms, with 27% users claiming to use it.

It was found that the female sterilization method was never used, suggesting the possibility of lack of awareness of this procedure [15].

A survey was carried out in the Muscat region in Oman in 2017, where 400 women from 12 different health centers were interviewed face to face. It was found that. Most of the women, i.e. 99.2% claimed to be aware of the concept of family planning and contraception. 56.3% knew that contraception was to prevent pregnancy before it happens. Among the 397 women who knew about contraceptive methods, three quarter, i.e. 76.8% reported an ever use of contraceptive methods while around half, i.e. 54% claimed to be current users of contraception. The withdrawal method was the most commonly used method among the users, with 70 participants claiming to use that, followed by Condoms with 43 users, Oral Contraceptive pills (40), and IUDs (31) [17].

According to the Jordan 2012 Population and Family Health Survey data, where 10801 women aged 15 - 49 were interviewed 42.4% of the women claimed to use modern methods of contraception, 18.9% used traditional methods, and 38.8% were not using any

contraceptive method. The overall contraceptive use rate has increased markedly over the past 2 decades, from 40% in 1990 to 61% in 2012. Among the users, the Intra-Uterine Device was the most commonly used modern method (21.0%). Contraceptive pills and male condoms were a joint second, with 8% users claiming to use each. Among Traditional methods, Withdrawal and the rhythm method were the most commonly used (14.3% and 3.5%, respectively) [11].

According to the United Nations Population Fund (UNFPA) data, in Bahrain, the proportion of women married or in-union aged 15 - 49, 62% are currently using, or their sexual partner is using, at least one method of contraception [12].

In UAE, 400 women at risk of pregnancy were randomly selected from the community and primary health care centers and interviewed about knowledge and practice of contraception using a structured questionnaire. 106 participants (41.5%) claimed to be using contraception. The most commonly used methods were the traditional methods (100%), such as the safe period or coitus interruptus, backed by modern methods such as intrauterine contraceptive device 56.5%, combined oral contraceptive pill 52.4%, and progesterone-only pill 41.6%. It was concluded that because of sociocultural traditions and religious beliefs, there was poor awareness of contraceptive use in the UAE [13].

In Iran, a study conducted in the Shiraz city area found that 71.25% of females in the urban area and 66% of the women in the rural areas used modern contraception methods. 20.1% of the urban women used traditional methods, whereas 21.5 of rural women using traditional methods. 8.7% of the city women and 12.5% of the rural women used no method of contraception [14].

2365 women of reproductive age were interviewed in a study conducted in turkey. Via a face-to-face interview, women were given a questionnaire. 1903 women (80.2%) declared d that they used some method of contraception, while 462 women (19.5%) had never used any type of contraceptive. The most commonly used method of contraception was found to be Intra-Uterine Devices (n = 1046, 55%) [16].

### Use of contraceptives in the middle eastern countries

Analysis of Nation wise contraceptive use (Figure 1), based on a February 2019 report on World Contraceptive use by United Nations, Department of Economic and Social Affairs, Population Division showed huge variation among the middle eastern countries. Iran showed the highest level of contraceptive use, with 77.40% of the women aged between 15 - 49 reporting the use of contraception, followed by Turkey, with 73.50% women claiming to use contraceptives and Israel at 68.2%. The lowest levels of contraception use were seen in Saudi Arabia with only 24.60% of the women aged between 15 - 49 reporting the use of contraceptives. The United Arab Emirates and Oman, too, showed usage of contraceptives, with 27.5% and 29.70% of the women reporting the use of contraceptives [22].

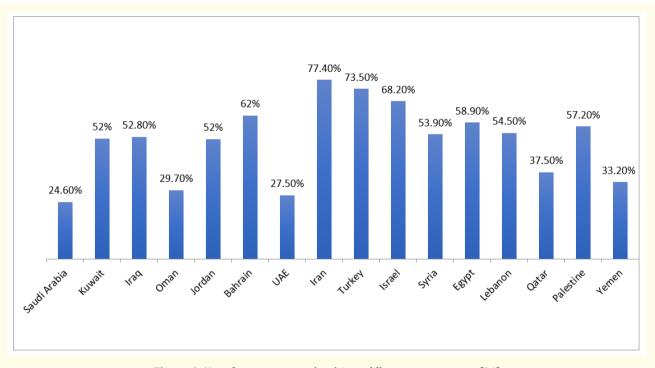


Figure 1: Use of contraceptives (any) in middle eastern countries [24].

The February 2019 report on World Contraceptive use by United Nations, Department of Economic and Social Affairs, Population Division [22] also showed that most of the women preferred using modern methods of contraception as compared to the traditional methods (Figure 2). Modern methods include barrier methods such as male and female condoms, diaphragm, cervical cap, and sponge; hormonal contraceptives that include oral, injectable, transdermal, vaginal ring, and implants; intrauterine devices (IUD). Traditional methods like rhythm method (periodic abstinence), fertility awareness-based methods, withdrawal (coitus interruptus), the lactational amenorrhoea method and folk methods are still used by women but show a comparatively lower rate of success in preventing pregnancy as compared to modern methods [5]. The most commonly used modern methods are Oral Contraceptives Pills and Intra-Uterine Devices [22].

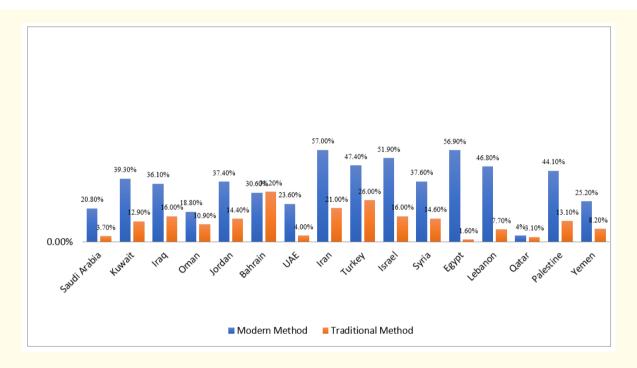


Figure 2: Traditional vs modern methods [24].

#### Discussion

Because of the political instability in the area, the rapidly growing population of the Middle East is of particular importance because of its serious effects on employment, access to health-care services, and the cost of government subsidies. The population of the Middle East tripled between 1970 and 2010 to about 350 million. The growth rate in 2011 varied from country to country, ranging from 0.24% in Lebanon to 3.28% in the United Arab Emirates. In developing countries, family planning has been advocated highly as a means to control the fast-growing population Contraception is a major component of family planning as well as reproductive health [21].

Our Analysis showed that the average percentage of females between 15 - 49 years of age in the Middle Eastern countries that use contraception is around 50.92%. This is well below the global average of 64% but much better than the African average of 33% (Figure 3) [21]. Some countries like Iran, Turkey and Israel faired much better than others and showed rates well at par or above the global average while others like Saudi Arabia, UAE, and Oman have alarmingly low levels of contraception use. None of the six Gulf Cooperation

Council countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates) have an official family planning program [23]. Contraception awareness and use in the various Middle Eastern countries is influenced by a number of factors including the religious beliefs and social traditions. There was also found to be a significant association between using birth control and age, high level of education and low family income of the women [13].

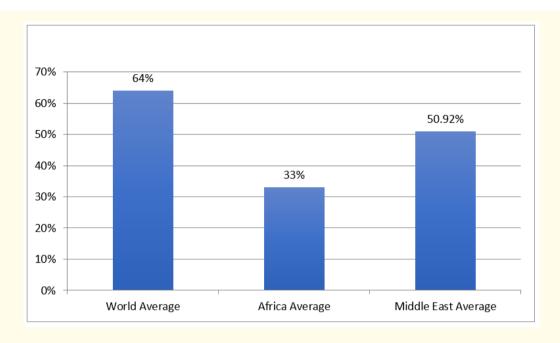


Figure 3: Comparison of contraceptive use [24].

Studies indicate that the total fertility rate of a nation is inversely related to the prevalence rate of contraceptive use [19]. The high birth rates and a high total fertility rate found in these counties relative to those of developed countries are also linked to underdevelopment. This brings to notice the Unmet need for Awareness and Implementation of Family Planning Programs in the Middle Eastern countries [18].

## Conclusion

It was found that the average percentage of females between 15 - 49 years of age in the middle eastern countries that use contraception is around 50.92%. This is well below the global average of 64%. This highlights the Unmet need for Awareness and Implementation of Family Planning Programs in the Middle Eastern countries.

### **Bibliography**

- 1. Cleland J., et al. "Contraception and health". Lancet 380.9837 (2012): 149-156.
- 2. Costa F J. "Non-contraceptive benefits of contraception". Sexualidade e Planeamento Familiar 8.2 (1995): 16-18.
- 3. Jensen JT and Speroff L. "Health benefits of oral contraceptives". *Obstetrics and Gynecology Clinics of North America* 27.4 (2000): 705-721.

- 4. Chichakli LO., et al. "Family planning services and programmes in countries of the Eastern Mediterranean Region". EMHJ Eastern Mediterranean Health Journal 6.4 (2000): 614-624.
- 5. Parveen N., et al. "Contraceptive awareness in reproductive aged Saudi women of Hail region". Saudi Journal of Medicine 2.2 (2017): 57-62.
- 6. Khan A., et al. "Awareness and practice of contraception among child bearing age women". Journal of Surgery Pakistan (International) 16.4 (2011): 179-182.
- 7. Megabiaw B. "Awareness and utilization of modern contraceptives among street women in North-West Ethiopia". *BMC Women's Health* 12.1 (2012): 31.
- 8. Alhusain F., et al. "Patterns and knowledge of contraceptive methods use among women living in Jeddah, Saudi Arabia". Saudi Journal for Health Sciences 7.2 (2018): 121-126.
- 9. Shah NM., *et al.* "Trends, patterns and correlates of contraceptive use among Kuwaitis, 1984–1999". *Medical Principles and Practice* 10.1 (2001): 34-40.
- 10. Al Sheeha M. "Awareness and use of contraceptives among Saudi women attending primary care centers in Al-Qassim, Saudi Arabia". *International Journal of Health Sciences* 4.1 (2010): 11-21.
- 11. Almalik M., et al. "Are users of modern and traditional contraceptive methods in Jordan different?" Eastern Mediterranean Health Journal 24.4 (2018): 377-384.
- 12. According to UNFPA Bahrain Country Implementation Profile (2012).
- 13. Ghazal-Aswad S., et al. "Knowledge and practice of contraception in United Arab Emirates women". BMJ Sexual and Reproductive Health 27.4 (2001): 212-216.
- 14. Asadisarvestani K., et al. "Determinants of contraceptive usage among married women in Shiraz, Iran". *Journal of Midwifery and Reproductive Health* 5.4 (2017): 1041-1052.
- 15. Abd AY. "Knowledge and Practice of Using Contraception among Iraqi Child Bearing Age Females". *American Journal of Pharmacy and Pharmacology* 4.6 (2017): 45-49.
- 16. Bozkurt N., et al. "Distribution of contraceptive use in a Turkish population". European Journal of Obstetrics and Gynecology and Reproductive Biology 131.1 (2007): 52-56.
- 17. Al Kindi RM and Al Sumri HH. "Prevalence and sociodemographic determinants of contraceptive use among women in Oman". *Eastern Mediterranean Health Journal* 25.7 (2019): 495-502.
- 18. World Population Prospects, Int. Highlights. United Nations; New York: 2006. Revision (2007).
- 19. Mauldin WP and Sinding S W. "Review of existing family planning policies and programs: lessons learned" (1993).
- 20. Ricci SS. "Essentials of maternity, newborn, & women's health nursing". Wolters Kluwer Health | Lippincott Williams & Wilkins (2013).
- 21. United Nations trends Contraceptive Use (2015).
- 22. United Nations, Department of Economic and Social Affairs, Population Division. World Contraceptive Use 2019 (POP/DB/CP/Rev2019) (2019).
- 23. Faour M. "Fertility policy and family planning in the Arab countries". Studies in Family Planning 20.5 (1989): 254-263.

Volume 16 Issue 1 January 2020 ©All rights reserved by Abrar Abdulfattah AlYamani., et al.