

FREQUENCY AND DETERMINANTS OF USING CONTRACEPTION METHODS AMONG MARRIED WOMEN IN REPRODUCTIVE AGE (15–49 YEARS), RIBAT UNIVERSITY HOSPITAL, KHARTOUM, SUDAN- 2021

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ABSTRACT

Objective: This descriptive, cross sectional, medical center-based study, was conducted at General Omar Sawi Medical Complex- Ribat University Hospital in Khartoum State in 2021 to measure the prevalence of using contraception methods among married women in reproductive age 15-49 years.

Methods: Sample size of 312 women was obtained by covering all attended women over a period of two months. Data was collected using a pre-prepared and pre-tested questionnaire.

Results: The study revealed that the prevalence rate of using contraception methods was 82.7%

Conclusion: The study revealed high prevalence of using contraception methods among married women which associated with many factors as; age, educational level, economic status, and compliance to usage.

KEY WORDS: Prevalence of using contraception and commonly used methods among married women in reproductive age 15-49 years.

INTRODUCTION

Contraceptive prevalence is the proportion of women who are currently using or whose sexual partner is currently using at least one method of contraception (**United Nation, 2019**). Contraceptive prevalence among married women at reproductive age increased slowly worldwide between 2000 and 2019 from 55.0% to 57.1%. Reasons for this slow increase are many, including: limited choice of methods, fear of side-effects... etc. Contraception methods are products or medical procedures that interfere with reproduction from sexual intercourse. Contraceptive prevalence rate among married women in Sudan according to the World Health Organization, in 2015 was 11.8%, in 2016 was 12.2%, in 2017 was 12.8%, in 2018 was 13.3%, and in 2019 was 13.9% (**World Health Organization, 2020**).

Methods are classified by their effectiveness as commonly used into very effective (0-0.9 pregnancies per 100 women), effective (1-9 pregnancies per 100 women), moderately effective (10-19 pregnancies per 100 women), and less effective (20 or more pregnancies per 100 women) (**World Health Organization, 2020**).

"In recent decades the use of contraceptive methods has risen, leading to improvements in health-related outcomes such as reduced unintended pregnancies, high-risk pregnancies, maternal mortality, and infant mortality, as well as improvements in schooling and economic outcomes, especially for girls and women. Besides, Reductions in fertility enhance economic growth." (**United Nations, 2020**).

In sub-Saharan Africa the annual rates of changes in modern contraceptive prevalence rates among all women of reproductive age 15–49 years varied from 0.77% in Lagos, Nigeria, to 3.64% in Ghana (**Ahmed et al., 2019**).

The 10 countries with the largest increases in the use of modern contraception between 2010 and 2019 are all found in sub-Saharan Africa, including Malawi, Lesotho, Kenya, Sierra Leone, Liberia, Burkina Faso, Senegal, Uganda, Madagascar and Mozambique (**United Nations, 2020**)

Setting selection

Sudan Family Planning Association (SFPA) distributes modern contraceptive methods through various channels in Khartoum including 94 hospitals, 16 clinics and medical centers, ministry of health clinics, and 60 doctors. SFPA provides the family planning unit at The General Omar Sawi Medical Complex with a monthly supply according to its consumption (Sudan Family Planning Association, 2020).

The Major General Omar Sawi Medical Complex has a family planning unit, married women at reproductive age 15-49 years attend this medical center each month by an average of 200 women for the refer clinic and 156 women for the family planning unit. Family planning services provided including consultations, application, providence, and follow up (Omar Sawi Medical Complex, 2021).

Topic and Target selection

In Sudan, Gazira State, and the contraceptive prevalence rate among married women is 61% and the most common methods used among married women are pills (40%) (Abdalla, 2017).

In Sudan, Khartoum, 55.9% of married women aged 15-49 were using contraceptive methods, the use of pills constituted 78.1%, followed by the IUDs 7.4% and injection 5.8% (Salih, 2017).

MATERIALS AND METHODS

Study Type: Descriptive, cross sectional, medical center-based study.

Study Setting: The General Omar Sawi Medical Complex- Ribat University Hospital is located in Khartoum State, Khartoum East locality.

Sample Size: Since the attending rate is 156/month, the study covered all attended women over a period of two months to obtain a sample size of 312 women.

Data Collection: Data was collected using a pre-prepared and pre-tested questionnaire. The questionnaire was directed to married women at reproductive-age to collect data regarding their sociodemographic characteristics and using of contraception methods ... etc.

Data Analysis: Data was analyzed using SPSS version 24 and the association between the different variables was checked using X² –test, P value ≤ 0.05 was considered significant.

Ethical Consideration: All married women had the right to participate or refuse to be within the study using an informed consent. The written confirmation consent was obtained from the administration of Omar Sawi Medical Complex; the approval was obtained from the Department of Family Planning, headed by the Obstetrics and Gynecology Department at Ribat University Hospital, Omar Sawi Medical Complex.

RESULTS

Table (1)

Socio-demographic characteristics of married women attending Omar Sawi Medical Complex-Khartoum - 2021 (n=312)

| Age (years) | No. | % |
|--------------|------------|------------|
| <18 | 0 | 0.0 |
| 18-30 | 113 | 36.2 |
| 31-45 | 193 | 61.9 |
| >45 | 6 | 1.9 |
| Total | 312 | 100 |
| Religion | No. | % |
| Muslim | 312 | 100.0 |
| Not Muslim | 0 | 0.0 |
| Total | 312 | 100 |
| Residence | No. | % |
| Urban | 303 | 97.1 |
| Rural | 9 | 2.9 |
| Total | 312 | 100 |

| | | |
|---|------------|--------------|
| Education of the woman | No. | % |
| Khalwa (Quranic) | 0 | 0.0 |
| Primary school | 0 | 0.0 |
| Intermediate | 0 | 0.0 |
| Secondary school | 51 | 16.3 |
| University and post | 261 | 83.7 |
| Total | 312 | 100.0 |
| Education of the husband | No. | % |
| Khalwa (Quranic) | 0 | 0.0 |
| Primary school | 12 | 3.8 |
| Intermediate | 6 | 1.9 |
| Secondary school | 48 | 15.4 |
| University and post | 246 | 78.8 |
| Total | 312 | 100.0 |
| Monthly income of the family (SDG) | No. | % |
| <44000 | 3 | 1.0 |
| 44001 – 52000 | 89 | 28.5 |
| 52001 – 75000 | 0 | 0 |
| >75000 | 220 | 70.5 |
| Total | 312 | 100.0 |
| Number of births | No. | % |
| 0 | 20 | 6.4 |
| 1 | 68 | 21.8 |
| 2 – 5 | 206 | 66.0 |
| > 5 | 18 | 5.8 |
| Total | 312 | 100.0 |
| Family size (Individual) | No. | % |
| <6 | 252 | 80.8 |
| 6 | 26 | 8.3 |
| >6 | 34 | 10.9 |
| Total | 312 | 100.0 |

Table (1): Reflects the Socio-demographic characteristics among married women

Table (2)
Using contraception methods among married women at Omar Sawi Medical Complex – 2021
(n=312)

| Used | No. | % |
|--------------|------------|--------------|
| Yes | 258 | 82.7 |
| No | 54 | 17.3 |
| Total | 312 | 100.0 |

Table (2): Shows that 82.7% of married women used method of contraception.

Table (3)
Reasons for using methods of contraception as mentioned by married women attending Omar Sawi
Medical Complex – 2021 (multiple answers question):
(n=258)

| Reason | No. | % |
|-------------------|------------|--------------|
| Woman health | 52 | 12.7 |
| Baby health | 95 | 23.2 |
| Economical reason | 27 | 6.6 |
| Birth spacing | 191 | 46.5 |
| Birth control | 36 | 8.8 |
| Husband choice | 9 | 2.2 |
| Total | 410 | 100.0 |

Table (3): Illustrates that the most common reason for using contraception methods among 46.5% married women was birth spacing.

Table (4)

Preference of a specific method of contraception among married women attending Omar Sawi Medical Complex – 2021.

(n=258)

| Prefer | No. | % |
|--------------|------------|--------------|
| Yes | 241 | 93.4 |
| No | 17 | 6.6 |
| Total | 258 | 100.0 |

Table (4): Represents that 93.4% of the married women preferred a specific method of contraception.

Table (5)

The preferred methods of contraception among married women attending Omar Sawi Medical Complex – 2021.

(n=241)

| Method | No. | % |
|---------------|------------|--------------|
| Calendar | 5 | 2.1 |
| LAM | 5 | 2.1 |
| Withdrawal | 7 | 2.9 |
| Abstinence | 0 | 0.0 |
| Condom | 11 | 4.5 |
| Implant | 104 | 43.2 |
| Pills | 74 | 30.7 |
| IUD | 35 | 14.5 |
| Sterilization | 0 | 0.0 |
| Total | 241 | 100.0 |

Table (5): Illustrates the variety of preference of contraception methods among married women.

Table (6)

The reasons for preferring a method of contraception as mentioned by married women attending Omar Sawi Medical Complex – 2021.

(n=241)

| Reason | No. | % |
|-------------------|------------|--------------|
| Easy usage | 45 | 18.7 |
| Less side effects | 70 | 29.0 |
| Availability | 81 | 33.6 |
| Efficacy | 45 | 18.7 |
| Total | 241 | 100.0 |

Table (6): Shows that 33.6% of the married women preferred a certain method of contraception due to the availability of the method.

Table (7)

The reasons for not preferring a method of contraception among married women attending Omar Sawi Medical Complex – 2021.

(n=17)

| Reason | No. | % |
|----------------------|-----------|--------------|
| Similar usage | 3 | 17.6 |
| Similar side effects | 5 | 29.4 |
| Similar efficacy | 9 | 52.9 |
| Total | 17 | 100.0 |

Table (7): Shows that 52.9% of the married women mentioned that the similarity in efficacy is their reason for not preferring a certain method of contraception.

Table (8)
satisfaction among married women attending Omar Sawi Medical Complex-2021;

| Satisfaction | Preference | | | | |
|----------------|------------|---------------|-----------|---------------|------------|
| | Yes | % | No | % | Total |
| Satisfied | 91 | | 3 | | 94 |
| To some extent | 118 | | 5 | | 123 |
| Not satisfied | 32 | | 9 | | 41 |
| Total | 241 | 100.00 | 17 | 100.00 | 258 |

$X^2 = 27.18$

$df = 2$

$p. \text{ value} = 0.00$ (Significant)

Table (8): The statistics showed a significant association between preference among married women for contraceptives and the level of their satisfaction from the use of contraceptives ($p. \text{ value} = 0.00$).

DISCUSSION

The study revealed that prevalence of using contraception methods among married women in reproductive age 15–49 years was 82.7%, this finding is similar to the finding of (United Nations, 2020) worldwide, who stated that the prevalence of using contraception methods among women in reproductive age in 37 countries was 55% and in 23 countries was below 20% in 2019. While (de Leon et al, 2019) in their study found that the contraceptive prevalence rate in Haiti was 31.3% and the prevalence rate in Brazil, Colombia, Costa Rica, Cuba and Paraguay was over 70%. Similarly to this research result; a study conducted by (Ba et al, 2019) in sub-Saharan Africa found that the prevalence of contraceptive use among women of reproductive age in sub-Saharan Africa is 17%. As well as the study by (Beson et al, 2018) in Ghana who found that 21% was the contraceptive prevalence rate among reproductive-aged women. A study conducted by (Alsalem et al, 2018) in Saudi Arabia showed that the prevalence rate of contraceptive use was 58.8%.

The study findings revealed that the commonly used method of contraception among married women of reproductive age was the subdermal hormonal implant (40.3%), this result is similar to the findings of a study carried by (Apanga et al., 2020) in 20 African countries and found that the subdermal hormonal implants were commonly Gambia 33%, Mali 33%, Guinea Bissau 25%, Benin 24%, and Togo 24%. While it disagrees with the findings of the same study; found that Injectable was more preferred choice in Madagascar, 67%, Malawi, 56%, Kenya 52%, and Sierra Leone 50%. Oral pills were more preferred choice in Sudan 84%, Mauritania 68%, Zimbabwe 60%, Tunisia 49% and Côte d'Ivoire 40%. Condoms were more preferred in Cameroon 69%, Congo 45%, and Lesotho 31%. Another dissimilarity with the findings of a study carried by (Alsalem et al, 2018) in Saudi Arabia and a study carried in Sudan by (Salih, 2017) who both stated that the oral pills were the most popular method and dominant over the others. It also disagrees with the findings of a study carried by (Egede et al, 2015) in Nigeria who found that the commonly used form of contraception was the barrier method (8.2%).

The results revealed that 93.4% of married women preferred a specific method of contraception, 47.7% of married women were satisfied to some extent with using methods of contraception, and there was significant association between preference among married women for contraceptives and the level of their satisfaction from the use of contraceptives ($p. \text{ value} = 0.00$).

CONCLUSION

The study revealed that the prevalence of using contraception methods among married women in reproductive age 15-49 years was 82.7%. Women 93.4% of married women preferred a specific method of contraception, the commonly used methods of contraception were the Subdermal Hormonal Implant (40.3%), the Oral Pills (30.7%), and the Intra Uterine Device (14.5%).

Recommendations

Based on the findings the study recommended family planning health education to sustain and promote using contraception methods and encouraging non-users.

REFERENCES

1. *Abdalla, I., Medan, N.E., 2017. Knowledge, Attitudes and Practice of Family Planning: A Case Study of Wad Asha Village, Gezira State, Sudan (2017) (Doctoral dissertation, University of Gezira).*
2. *Ahmed, S., Choi, Y., Rimon, J.G., Alzouma, S., Gichangi, P., Guiella, G., Kayembe, P., Kibira, S.P., Makumbi, F., OlaOlorun, F. and Omoluabi, E., 2019. Trends in contraceptive prevalence rates in sub-Saharan Africa since the 2012 London Summit on Family Planning: results from repeated cross-sectional surveys. The Lancet Global Health, 7(7), pp.904-911.*

3. **Alsaleem, M.A., Khalil, S.N., Siddiqui, A.F., Alzahrani, M.M. and Alsaleem, S.A., 2018.** Contraceptive use as limiters and spacers among women of reproductive age in southwestern, Saudi Arabia. *Saudi medical journal*, 39(11), p.1109.
4. **Apanga, P.A., Kumbeni, M.T., Ayamga, E.A., Ulanja, M.B. and Akparibo, R., 2020.** Prevalence and factors associated with modern contraceptive use among women of reproductive age in 20 African countries: a large populationbased study. *BMJ open*, 10(9), pp.1-14
5. **Ba, M. D., Ssentongo, P., Agbese, E. and Kjerulff, K.H., 2019.** Prevalence and predictors of contraceptive use among women of reproductive age in 17 subSaharan African countries: a large population-based study. *Sexual & Reproductive Healthcare*, 21, pp.26-32.
6. **Beson, P., Appiah, R., Adomah-Afari, A., 2018.** Modern contraceptive use among reproductive-aged women in Ghana: prevalence, predictors, and policy implications. *BMC Womens Health* 18, 1–8.
7. **de Leon, R.G.P., Ewerling, F., Serruya, S.J., Silveira, M.F., Sanhueza, A., Moazzam, A., Becerra-Posada, F., Coll, C.V., Hellwig, F., Victora, C.G. and Barros, A.J., 2019.** Contraceptive use in Latin America and the Caribbean with a focus on long-acting reversible contraceptives: prevalence and inequalities in 23 countries. *The Lancet Global Health*, 7(2), pp.227-235.
8. **Salih, I.S.M., 2017.** Utilization of Contraceptive Methods among Antenatal Care Attendants in Alkalakla Sangaat Health Centre, Khartoum State, Sudan (2017) (Doctoral dissertation, University of Gezira).
9. **Sudan Family Planning Association, 2020.** Contraception methods' report for the year 2020. Khartoum, Sudan Family Planning Association.
10. **United Nations, 2020.** World fertility and family planning 2020. New York, United Nations.
11. **United Nations, Department of Economic and Social Affairs, Population Division 2019.** World Contraceptive Use 2019. New York, United Nations.
12. **World Health Organization, 2020.** Family planning/contraception methods. November 2020 Geneva WHO.