

Utilisation of Fertility Awareness Based-Methods (FABMs) of Family Planning Among Senior Secondary Students in Okrika Kingdom, Rivers State

Samuel, Gentle Kitoye

Department of Human Kinetics, Health and Safety Education, Ignatius Ajuru University of
Education, Rivers State, Nigeria

Amba, Marian Orisa-Couple

School of Public Health Technology, Rivers State College of Health Science and Technology,
Rumueme, Port Harcourt, Rivers State, Nigeria

Abstract: Modern family planning use has risen in the developed world compared to the developing countries including Nigeria. Nigeria is already facing population explosion, as the birth rate is higher than the World average. This study examined the utilization of fertility awareness-based methods of faming planning among Senior Secondary pupils in Okrika Kingdom of Rivers State. The descriptive cross sectional design was used with a population which comprised 5,087 senior secondary students in Okrika Kingdom. The sample size was 408 which was determined using the Taro Yamane formula: $n = \frac{N}{1+N(e)^2}$. Multistage sampling procedure was adopted to select the participants. The research instrument for this study was a questionnaire designed titled “knowledge of fertility awareness based method rating scale (KFABMRS)”, with a reliability coefficient of 0.79. Data was collected by administering the questionnaire to the respondents physically. The completed copies of the questionnaire were collated, coded and analysed using mean and Point Biseral at 0.05 Alpha level. The result showed on that, only about one quarter 101(25.3%) indicated that they are currently using any FABM while 82(20.6%) used it in the past. The top in the list of FABMs of family planning used was calendar/rhythmic method 67(16.8%), followed by the cervical mucus method 28(7.0%) and the fewest being basal body temperature method 12(3.0%). FABMS of family planning was utilized more by Traditionists (100%), followed by Muslims (26.7%), and Christians (26.7%). Students aged 15-19 years utilize FABMS of family planning most (25.5%), followed by those aged 10-14 years (25.0%). There was a statistically significant relationship between utilization of FABMS of family planning and both age ($N = 399$, $r = 0.12$, $p = 0.00$), and religion and ($N = 399$, $r = 0.06$, $p = 0.19$). It was concluded that there was a low utilization of fertility awareness-based methods among senior secondary students, which was linked directly to the age and religious affiliation of the students. It was recommended among others that, the Government should establish more youth friendly /school based family planning services to make FABMs accessible to all students, this will proffer solution to the problem of lack of access to contraceptives.

Keywords: Awareness-Based, Family Planning, Secondary, Students.

Introduction

Family planning allows individuals to prevent or achieve pregnancy only when needed. Natural or Fertility Awareness-Based Methods (FABMs) as explained by Smoley and Robinson, refers to family planning methods that allow users to monitor and identify various external biological markers that are indicative of the fertile days of a woman's reproductive cycle. External biological markers can include: basal body temperature, urinary metabolites, and cervical fluid secretions. All FABMs are free of artificial hormonal therapies, injections, implants, and have no side effects [1]. Additionally, some FABMs can help users to achieve or prevent pregnancy, monitor, interpret and chart their biological markers of their reproductive health (from menarche to menopause). Thus, FABMs can be used to meet a wide range of reproductive health needs.

During family planning consultations, fertility awareness improves the student's understanding of how each method of family planning prevents fertilization from taking place and how the risk of pregnancy will increase if the method is not used correctly. For example, how the combined oral contraceptive pill prevents ovulation and makes the cervical secretions thick and impenetrable to sperm as well as understanding how fertility can quickly return if pills are not taken as directed [2], [3]. The Federal Ministry of Health Nigeria, in collaboration with support from US Agency for International Development (USAID)-Vision Project enlisted seven types of Fertility Awareness-Based Methods (FABMs) which includes Calendar/ rhythm method, Basal body temperature (BBT), Cervical mucus method (CMM) or Billings method, Sympto-thermal method (STM), Lactational amenorrhea method (LAM), Coitus interruptus (withdrawal method) and Periodic Abstinence. One can assert that knowledge will influence utilization. However, student may not have comprehensive knowledge of these methods. Utilization according to Azubuike is the use of something especially for practical purposes. Utilization in this study is the extent to which Fertility-Awareness Based Methods are being used by senior secondary school students to prevent pregnancy.

Despite the utility of modern FABMs, and research suggesting women are interested in using FABMs for family planning, it is estimated that only 1% to 3% of reproductive age females in the United States are currently using FABM [4]. These estimates only reflect rates of FABM, use for family planning. There is no information about the percentage of females that are using a FABM, for health monitoring. FABMs are family planning options suggested for use by the World Health Organization (WHO), American College of Obstetricians and Gynaecologists (ACOG), Centers for Disease Control and Prevention (CDC). One of the major objectives was to develop an accurate, easy, and cheap test that could be used in the home to predict the start and end of the fertile time. It has been reported by the Nigeria Population Commission that the knowledge of family planning is the lowest among women with no education and greatest among those with Secondary education and more. Modern family planning use has risen in the developed world compared to the developing countries including Nigeria. Nigeria is already facing population explosion. Food production can no longer match the growing population, in Nigeria today, as the birth rate is higher than the World average. The prevalence of contraceptive use seems to be high but differs among family type. Studies of Kidayi, et al. showed that 27% prevalence rate was found among those that are currently married and cohabiting. Certain factors are likely to predict the use of contraceptives among women of reproductive age [5]. Studies of Adebowale, et al. showed that the prevalence of contraceptive use was higher among Yoruba's (41.8%) than the Hausa (3.6%).

The age at which secondary school pupils engage in sexual activities varies considerably depending on the various socializing influence and the opportunities available for sexual behaviour. For instance, the economic situation of the individuals, lifestyle or family history. Nigeria's Demographic and Health Survey –NDHS, (2013) reported that adolescent in Nigeria account for 22.5 percent of the population and 11.6 percent of these adolescents aged 15-19 are sexually active (about 1 in 5 of sexually active females and 1 in 12 sexually active males) had already engaged in sexual intercourse by the age of 15 years or even below 12 years. Furthermore, a sexually active adolescent who does not use Contraceptive has a 90 percent chance of pregnancy within one year.

Religious beliefs may also influence one's contraceptive use. Several studies have shown that religion play a significant role in the use of contraceptive methods. Tengia-Kessy and Rwabudongo reported that religion played a major role in method use and choice. Islam for example is said to prefer Injectable contraceptive compared to other modern methods. The success of contraceptive use in Islam is attributed to the fact that Islamic leaders were consulted before program implementation. Studies of Adebowale et al. showed that more than half of Yoruba ethnic group (41.8%) had an increased use of contraceptive as compared with the Hausa (3.6%). It means that Religion is a strong predictor of contraceptive use ($P < 0.05$). Studies of Mohammed-Durosamorun et al. showed a statistically significant difference between religion (Muslim and Christian) and contraceptive use ($P .000$) [6]. The use of contraceptive is high and ranged from 49.7% in 2008 to 54.92% in 2014 among Christians than the Muslim faithful. Furthermore, religious belief may predict the use of contraceptives. Those who consider their religious beliefs while deciding the use of modern contraceptive have less chances of using modern contraception.

On the other hand, risky sexual life style often results to unplanned and unintended pregnancy. Many are terminated and since abortion is legally restricted in Nigeria, they seek the services of private providers. Some of them are untrained, and practice in unsafe environments. Unsafe abortion has serious adverse health consequence. Apart from its impact on population, the consequences are most times grave; for example, it could lead to spike in sexually transmitted infections and school dropout. And for adolescent who refuse to seek abortion, have their consequences, given their tender age [7]. For example, they will have increased risk of anemia and pre-eclampsia. Others include low birthweight, complication as a result of poor or sometimes zero antenatal care. More so, as a result of Maternal age vis a vis fetal growth, the health of the offspring during the early years could be affected. It has been observed that their children have more nutritional and behavioural problem than children of older mothers. Interestingly, some of the aforementioned reproductive health challenges are preventable. Their persistence and pervasiveness has become a matter of grave concern. This forms the basis of the present study on knowledge and Utilization of Fertility Awareness Based-Methods (FABMs) of family planning among Senior Secondary pupils in Okrika Kingdom Rivers State [8]. The study provided answers to the following research questions:

1. What is the utilization of FABMs of family planning among senior secondary students in in in Okrika Kingdom?
2. What is the utilization of FABMs of family planning among senior secondary students in Okrika Kingdom based on age?
3. What is the utilization of FABMs of family planning among senior secondary students in Okrika Kingdom based on Religion?

Hypotheses

The following null hypothesis were formulated to guide the study at 0.05 significant level:

1. There is no statistical significant relationship between age and utilization of FABMs of family planning among senior secondary students in Okrika Kingdom, Rivers State based on age.
2. There is no statistical significant relationship between religion and utilization of FABMs of family planning among senior secondary students in Okrika Kingdom, Rivers State based on age.

Methodology

The descriptive cross sectional survey design was used for this study. The population for this study comprised 5,087 senior secondary students in Okrika Kingdom, Rivers State. The sample size for the study consisted 408 which was determined using the Taro Yamane formula: $n = N/1+N(e)^2$. Multistage sampling procedure was adopted to select the participants. At the first stage, the stratified sampling technique was used to group Okrika Kingdom into three strata three based on the region namely: Ogu/Bolo, Okrika and parts of Port Harcourt Abuloma, Amadi-Ama & Okuru-

Ama). At stage two, the proportionate sampling technique was used to select number of participants based on the number of students in each strata. At stage three, simple random sampling method was used select schools from each of the strata. Two from (Ogu Bolo), four (Okirika) and two schools (Port Harcourt) LGA. This gave a total of eight schools. Stage four adopted a systematic sampling technique to draw the number of participants from each of the classes with the aid of the teachers.

The research instrument for this study was a questionnaire designed titled “Utilization of fertility awareness-based method rating scale (UFABMRS)”, with a reliability coefficient of 0.79. Data was collected by administering the questionnaire to the respondents physically. The completed copies of the questionnaire were collated, coded and analysed using mean and Point Biserial at 0.05 Alpha level.

Results

The result of the study were presented below:

Table 1. Percentage distribution of senior secondary students in Okrika Kingdom who utilized FABMS of family planning

SN	Items	Yes F(%)	No F(%)	Decision
1	Currently using any FABM method	101(25.3)	298(74.7)	Low
2	Used any FABM in the past	82(20.6)	317(79.4)	Low
3	Used FABM effectively	92(23.1)	267(76.9)	Low
4	Avoided having sexual intercourse to prevent pregnancy	100(25.1)	245(74.9)	Low
5	Calculates safe days using calendar/rhythmic method	67(16.8)	332(83.2)	Low
6	Used the calendar method to calculate ovulation and plan sexual intercourse	30(7.5)	369(92.5)	Low
7	Used cycle bead to monitor and plan sexual activity	19(4.8)	380(95.2)	Low
8	Took record of body temperature every morning to monitor ovulation and plan sexual intercourse	18(4.5)	381(95.5)	Low
9	Regularly wipes and check vaginal secretion to note changes in secretions to know ovulation	28(7.0)	371(93.0)	Low
10	Recorded body temperature every morning along with wiping and checking vaginal secretion regularly to plan sexual intercourse	12(3.0)	387(97.0)	Low

Table 1 revealed the utilization of FABMS of family planning among senior secondary students in Okrika Kingdom. The result established that about one quarter 101(25.3%) indicated that they are currently using any FABM while 82(20.6%) used it in the past. The top in the list of FABMs of family planning used was calendar/rhythmic method 67(16.8%), followed by the cervical mucus method 28(7.0%) and the fewest being basal body temperature method 12(3.0%) [9]. Thus, about one quarter of senior secondary students in Okrika Kingdom utilized FABMS of family planning.

Table 2. Percentage distribution showing age and utilization of FABMS of family planning among senior secondary students in Okrika Kingdom, Rivers State

Age	Utilized FABMs		Total	Decision
	No	Yes		
10-14 years	102(75.0)	34(25.0)	136(100)	Low
15-19 years	196(74.5)	67(25.5)	263(100)	Low
Total	298(74.7)	101(25.3)	399(100)	Low

Table 2 showed the percentage distribution of utilization of FABMS of family planning based on age. The result showed that senior secondary students aged 15-19 years utilize FABMS of family planning most (25.5%), followed by those aged 10-14 years (25.0%). Thus, based on age,

utilization of FABMS of family planning among senior secondary students in Okrika Kingdom, Rivers State was more among the older students [10].

Table 3. Percentage distribution showing religion and utilization of FABMS of family planning among senior secondary students in Okrika Kingdom

Religion	Utilized FABMs		Total	Decision
	No	Yes		
Islam	11(73.3)	4(26.7)	15(100)	Low
Christianity	287(75.1)	95(24.9)	382(100)	Low
Tradition	0(0.00)	2(100)	2(100)	Low
Total	298(74.7)	101(25.3)	399(100)	Low

Table 3 showed the percentage distribution of utilization of FABMS of family planning based on religion. The result showed that Traditionists (100%) utilize FABMS of family planning most followed by Muslims (26.7%), and the least are those of the Christian religion (26.7%) Thus, based on religion, utilization of FABMS of family planning among senior secondary students in Okrika Kingdom, Rivers State was more among non-Christians.

Table 4. Point biserial correlation showing relationship between age and utilization of FABMS of family planning among senior secondary students in Okrika Kingdom Rivers State

Variables		Utilization	Age	Decision
Utilization	Correlation Coefficient	1	0.12	H ₀ rejected
	Sig.		0.00*	
	N	399	399	
Age	Correlation Coefficient	0.12	1	
	Sig	0.00*		
	N	399	399	

* Significant; $p < 0.05$

Table 4 presents the Point Biserial Correlations on relationship between age and utilization of FABMS of family planning among senior secondary students in Okrika Kingdom. The result revealed that there was a statistically significant relationship between age and utilization of FABMS of family planning as $p < 0.05$ ($N = 399$, $r = 0.12$, $p = 0.00$). Thus, the null hypothesis which stated that there is no significant relationship between age and utilization of FABMS of family planning among senior secondary students in Okrika Kingdom, Rivers State was rejected [11].

Table 5. Point biserial correlation showing relationship between religion and utilization of FABMS of family planning among senior secondary students in Okrika Kingdom

Variables		Utilization	Religion	Decision
Utilization	Correlation Coefficient	1	0.06	H ₀ not rejected
	Sig.		0.19*	
	N	399	399	
Religion	Correlation Coefficient	0.06	1	
	Sig	0.19*		
	N	399	399	

*Not Significant; $p > 0.05$

Table 5 presents the Point Biserial Correlations on relationship between religion and utilization of FABMS of family planning among senior secondary students in Okrika Kingdom. The result revealed that there was no statistically significant relationship between religion and utilization of FABMS of family planning as $p < 0.05$ ($N = 399$, $r = 0.06$, $p = 0.19$). Thus, the null hypothesis

which stated that there is no significant relationship between religion and utilization of FABMS of family planning among senior secondary students in Okrika Kingdom, Rivers State was not rejected.

Discussion of Findings

The study findings revealed that about one quarter of senior secondary students in Okrika Kingdom utilize FABMS of family planning which showed low utilization. using Fosu's division of utilization when less than fifty percent of respondents used the services. This result means that majority of students do not make use their safe or fertile period to target sexual intercourse, the implication is increased incidence of teenage unplanned, unwanted pregnancy which could lead to abortion or school dropout. This is not a surprise since respondents do not possess adequate knowledge of FABMS. In line with the present study is one conducted by Kabonga et al. which reveals low (4%) utilization of natural family planning in all parts of Zambia. According to him, the problem of low utilization of NFP is worldwide, it can also be related to low level of knowledge and negative attitudes towards its use. The finding is in agreement with that of Ezeome and Nwankwo in Enugu which showed low usage of fertility awareness based methods (FABMs) of family planning among men and women in Enugu, Nigeria [12].

This study also corroborates with findings of Capotosto, and Jurgens (2020) which revealed low usage of Only 113 women (27%) out of 423 women using one of three FABMs. Also, among those using any contraceptive low utilization is also reported by Ndudi et al and Olugbenga-Bello, et al in South-Western Nigeria (8.5%) and 41(6.7%) respectively were using natural methods respectively. The similarity might be because they were carried out in Nigeria. However, the finding is not in line with result of Foluso and Gigi whose study in Ogun State, Nigeria showed high utilization rate (60.7%) the dissimilarity between the two is that while the previous study was carried out in a private university among non-academic workers (adult) the present was carried out among secondary school students in rural area. Urban dwellers have more access to information and family planning services than rural dwellers. Studies by Dangat and Njau concluded that most secondary school students do not utilize family planning services despite adequate knowledge on family planning. This is worrisome as medical personal who expected to teach their clients do not have adequate knowledge and so do not mention it as an option of family planning method. Physicians and family planning providers should include FABMs as one of the options during counselling to proffer solution to the problem of lack of access to contraceptive service in the rural areas. Lack of knowledge is linked with low uptake, because everything we do depends on our level of knowledge of that method which we want to utilize. It is therefore necessary for students to be educated and sensitized about use of FABMs of family planning [13].

The utilization of FABMS was seen more among older students aged 15-19 years. This implies that more of the older student are sexually active are capable of preventing pregnancy using their safe period to engage in coitus than those below 15years. This is expected because growth and development increases with age and it is believed that reproductive hormone levels are at their peak, hence increase sexual arousal and engagement in sexual intercourse as a result they would be interested to utilize family planning in one or another way. Demographic and Health Survey 2013 reported that adolescent in Nigeria aged 15- 19 are sexually active. The present findings are consistent with those of Ndudi et al. in Abakaliki Metropolis, Ebonyi State, result showed that age influences contraceptive use, those above 18 years are likely to use contraceptive. Tested hypothesis revealed that there was significant relationship between age and utilization as $p < 0.05$ ($N = 399$, $r = 0.35$, $p = 0.00$) The findings of this study is in consonance with a study carried out on determinants of contraceptive usage among married women in Shiraz, Iran by Sarvestani et al. results showed that there was a significant association between age and contraceptive usage. The finding of this study is at variance with studies conducted by Kabonga et al which established that there is no significant association between age and utilization of NFP as different percentages of the older and younger age groups tended to ever use (42.4% and 26.8%) and never used (41.2% and 13.6 %) NFP respectively. Also, findings of Capotosto, and Jurgens showed that age was not

significant factors in FABM use. Findings of Apanga and Adam showed that age was not statistically significant. Similarity might be because the studies were done on FABMs. The dissimilarity between the previous and present study might be due to the fact that the previous was done among married women whereas the present was focused on secondary school students.

Utilization of FABMS of family planning among senior secondary students was more among Muslims and traditionalists. This result indicates that more adolescents who are of the Muslim and traditional religion make use of fertility awareness based methods to plan the time they have sexual intercourse unlike the Christian students. This may be partly connected to the fact that many Christians disapprove of premarital sex and religious adolescents are less likely to engage in premarital sex. The findings of this study agree with the result of Owolabi, et al from a study carried out among women in Osogbo in Nigeria which showed utilization was more among 118(59%) Muslim women [14]. The tested hypothesis revealed that there was no statistically significant relationship between religion and utilization as $p > 0.05$ ($N = 399$, $r = 0.02$, $p = 0.65$). of FABMS of family planning among senior secondary students in Wakirike. This finding is at variance with findings by Ejembi et al. who reported that religion showed a positive predictor to contraceptive use with communities with a higher proportion of Muslim women (OR 0.72, CI: 0.58-0.87), findings of Olugbenga-Bello, et al in rural communities in South-Western Nigeria revealed that the most significant socio-demographic determinants of ever use of contraceptives was religion p -value 0.001 in the negative, both studies were carried out in the rural area [15].

Studies of Mohammed-Durosamorun et al showed a statistically significant difference between religion (Muslim and Christian) and contraceptive use ($P = .000$). While study by Aviisah, et al, showed that usage of contraceptive is high and ranged from 49.7% in 2008 to 54.92% in 2014 among Christians than the Muslim faithful. This finding is different from the present study. The findings of this study are also in agreement with studies conducted by Capotosto, and Jurgens likewise Apanga and Adam in Tolensi District, Ghana where 56% (157/280) participants were Christians but concluded that religion was not statistically significant with usage of family planning. The difference could be that the previous study was carried out among women while the present was among secondary school students who are still under the control of their religious leaders whereas adults are matured and can take decisions on their own because they have better understanding.

Conclusion and Recommendations

Based on the findings of the study, it was concluded that there was a low utilization of fertility awareness-based methods of family planning among senior secondary students in Okrika Kingdom, Rivers State which was linked directly to the age of the students. Based on the findings of the study, the following recommendations are made;

Government should establish youth friendly /school based family planning services to make FABMs accessible to all students, this will proffer solution to the problem of lack of access to contraceptives.

Religious leaders to teach comprehensive sex education to their members and encourage uptake of FABMs family planning.

Government, Health educators and family planning based non-governmental agencies should organize periodic Seminars and youth gathering for secondary school girls to update them on the use of FABMs to achieve the desired behavioural change.

References

- [1] S. A. Adebawale, I. A. Adeoye, and M. E. Palamuleric, "Contraceptive use among Nigerian women with no fertility intention: Interaction and potential causative factors," *Union for African Population Studies*, vol. 27, no. 2, pp. 127–139, 2013.
- [2] P. W. Apanga and M. A. Adam, "Factors influencing the uptake of family planning services in Ghana," *Pan African Medical Journal*, vol. 20, no. 1, pp. 10–19, 2015.

- [3] P. A. Aviisah, S. Dery, B. K. Atsu, A. Yawson, R. M. Alotailji, H. R. Rezk, and C. Guure, "Modern contraceptive use among women of reproductive age in Ghana: Analysis of 2003–2014 Ghana Demographic and Health Survey," *Women's Health*, vol. 18, no. 1, pp. 141–148, 2018.
- [4] P. Benson, R. Appiah, and A. Adomah-Afari, "Modern contraceptive use among reproductive-aged women in Ghana: Prevalence, predictors, and policy implication," *BMC Women's Health*, vol. 18, no. 1, Art. no. 157, 2018.
- [5] C. M. Dangat and B. Njau, "Knowledge, attitudes and practices on family planning services among adolescents in secondary schools in Hai District," *Tanzania Journal of Health Research*, vol. 15, no. 1, pp. 1–8, 2013.
- [6] C. L. Ejembi, T. Dahiru, and A. A. Aliyu, "Contextual factors influencing modern contraceptive use in Nigeria," *Demographic and Health Survey, USAID*, no. 120, 2015.
- [7] I. V. Ezeome and T. O. Nwankwo, "Knowledge and use of fertility awareness based methods (FABMs) of family planning (FP) among men and women in Enugu, Nigeria," *EC Gynaecology*, vol. 9, no. 1, pp. 1–12, 2020.
- [8] R. J. Fehring, M. Schneider, K. Raviele, D. Rodriguez, and J. Pruszynski, "Randomized comparison of two Internet-supported fertility-awareness-based methods of family planning," *International Review of Natural Family Planning*, vol. 32, no. 1, pp. 55–60, 2013.
- [9] O. E. Johnson, "Determinants of modern contraceptive uptake among Nigerian women: Evidence from the National Demographic and Health Survey," *African Journal of Reproductive Health*, vol. 21, no. 3, pp. 89–96, 2017.
- [10] P. L. Kidayi, S. Nisuya, J. Todd, C. C. Mtuya, T. Mtuy, and M. J. Mahande, "Determinants of modern contraceptive use among women of reproductive age in Tanzania: Evidence from Tanzania Demographic and Health Survey data," *Global Healthcare & Fitness Summit*, pp. 20–22, 2015.
- [11] M. D. Manhart, M. Duane, A. Lind, I. Sinai, and J. Golden-Tevald, "Fertility awareness-based methods of family planning: A review of effectiveness for avoiding pregnancy using SORT," *Osteopathic Family Physician*, vol. 5, no. 1, pp. 2–8, 2013.
- [12] A. Mohammed-Durosolorun, J. Adze, S. Bature, A. Abubakar, C. Mohammed, M. Taingson, and L. Airede, "A quantitative survey on potential barriers to the use of modern contraception among married women of high parity attending an antenatal clinic in Kaduna, Northern Nigeria," *Archive of Medicine and Surgery*, vol. 1, no. 1, pp. 30–34, 2017.
- [13] A. I. Olugbenga-Bello, O. L. Abodunrin, and A. A. Adeomi, "Contraceptive practices among women in rural communities in south-western Nigeria," *Global Journal of Medical Research*, vol. 11, no. 2, pp. 17–24, 2011.
- [14] E. O. Owolabi, D. D. TerGoon, and E. Seekoe, "Attitude to, and knowledge and practice of family planning among women of child-bearing age attending selected hospitals in Osogbo, Nigeria," *Africa Journal of Nursing and Midwifery*, vol. 19, no. 3, pp. 1–13, 2017.
- [15] J. F. Peipert, T. Madden, J. E. Allsworth, and G. M. Secura, "Preventing unintended pregnancies by providing no-cost contraception," *Obstetrics & Gynecology*, vol. 120, no. 6, pp. 1291–1297, 2012.