

Research Article

Contraceptive Uptake among Adolescent Girls Attending Family Planning Units in Four Health Facilities in Cameroon

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Abstract

Background and aim: In Africa and particularly in Cameroon, a substantial number of adolescent girls experience the negative health consequences as a result of not using contraceptives. The aim of this study was to determine contraceptive uptake among adolescent girls; specifically, to determine the principal trends in contraceptive use from 2012-2017 in the family planning units of four health facilities in the Kumbo West Health District of Cameroon and to identify the effect of age, marital status and parity on the choice of contraceptive method.

Methods: A retrospective record of 886 adolescent girls who attended the family planning and general gynaecology outpatient departments units of the four health facilities were reviewed for the period between the years 2012-2017. Data analyzed with SPSS version 21. Pearson chi-square test was used as a test of significance and P value <0.05 was considered statistically significant.

Results: Within the study period, the contraceptive uptake was 10.7%. IUD was the most commonly used method of contraception (27.4%), followed by the progestogen only injectable contraceptives (26.3%), then vacuum aspiration (4.2%) and implants (3.2%). Late adolescents, married adolescents and adolescent mothers were more likely to use contraceptives than early adolescents, single adolescents and those with 0 parity. IUD and jadelle uptake were not statistically significant with age, parity and marital status (P>0.05). However, Progestin injection uptake was statistically significant with parity (P=0.011).

Conclusions: Contraceptive uptake is relatively low among the adolescent girls. There is a need to improve access, availability and delivery of family planning services in Cameroon.

Keywords: Contraception; Uptake; Adolescent girls; Kumbo; Cameroon

1. Introduction

The World Health Organization (WHO) reports that, 214 million women of reproductive age, including adolescent girls in developing countries who want to avoid pregnancy are not using a modern contraceptive method [1]. Also, it has been reported that about half of all pregnancies among adolescent females in developing regions are estimated to be unintended, and more than half of these unintended pregnancies result in induced, and often unsafe, abortion [2, 3]. In addition, unprotected sexual intercourse that can lead to unintended pregnancy exposes adolescents to the risk of sexually transmitted infections, including HIV, which is currently a large contributor to the overall disease burden among adolescents in Sub-Saharan Africa including Cameroon [4-6]. It is in this light that an improvement in the access to the use of contraceptives needs to be a key component of an overall strategy to prevention of risky adolescent pregnancies in our societies. Amidst increasing calls to prioritize adolescents' girls contraceptive needs, understanding current patterns of adolescent FP service use is important to achieving universal access to sexo-reproductive health services [6]. Misconceptions about how contraception works, sociocultural and religious factors are frequently cited as reasons for not using a method among adolescent girls [4, 5]. It is worthy to note that, appropriate health education and counseling is important to addressing knowledge gaps around pregnancy prevention and consistent contraceptive use among adolescent girls.

However, adolescent girls encounter enormous barriers to accessing quality reproductive health care [1, 4-6], including health provider bias, age stigmatization or restrictions when seeking FP services, and issues about confidentiality, judgmental/intrusive attitudes of health workers towards the adolescents [5]. WHO guidelines reiterated the improvement of adolescent health services [7], and interventions to make health services "youth friendly" have appeared in several small-scale initiatives, primarily led by nongovernmental organizations (NGOs) as well as government-run health facilities [7]. Much of the evidence on young people's contraceptive uptake in sub-Saharan Africa comes from small-scale, often qualitative studies which are not nationally representative [1]. The private sector is an important source of FP care in the region for women of all ages [8], suggesting that public-sector efforts expanding youth-friendly services may miss a significant proportion of young people accessing private providers [8].

Maternal mortality can only occur in the presence of a pregnancy [9]. Family planning is therefore an indispensable tool in reducing maternal mortality and morbidity [10]. Contraceptive uptake is one of the most pertinent associative factors of pregnancy/birth rates in the world, so contraceptive profiles provide useful information for policy makers [1]. The aim of this study was to determine contraceptive uptake among adolescent girls; specifically, to determine the principal trends in contraceptive use from 2012-2017 in the family planning units of four health facilities in the Kumbo West Health District of Cameroon and to identify the effect of age, marital status and parity on the choice of contraceptive method.

2. Materials and Methods

2.1 Study design

This was a retrospective chart review. A retrospective record of 886 adolescent girls who attended the family planning and general gynaecology outpatient departments units of the four health facilities were reviewed for the period between the years 2012-2017. Information about age, marital status, parity and choice of contraception were extracted using a structured proforma.

2.2 Study area

This study was specifically carried out in four randomly selected health facilities of the Kumbo West Health District namely Bansa Baptist Hospital, Kitiwum Integrated Health Centre, Kumbo_Urban Medicalised Health Centre and Melim Integrated Health Centre. Kumbo is the second-largest city in the North West region of Cameroon. Kumbo is split into three distinctive hilly settlements of Tobin, Mbveh, and Squares. Figure 1 shows the Health Map of the Kumbo-West Health District of Cameroon.

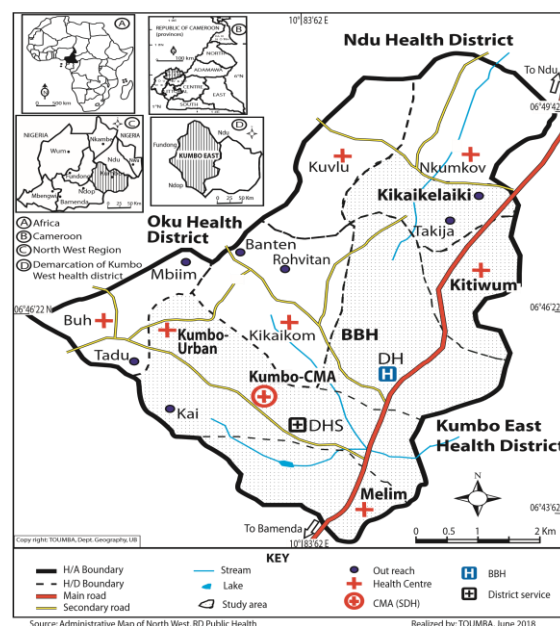


Figure 1: Health Map of the Kumbo-West Health District (KWHD).

2.3 Data management

Research structured forms and other study materials were stored safely in a locker in a safe location and secured by locking it with a lock. After collection of the data, the forms were checked visually for completeness, obvious errors, and inconsistencies and then corrected. Data collected was entered daily into an electronic questionnaire (template) created in Epi info version 7 by the investigator. During the data entry process, 10% of data entered at the beginning was checked to ensure that the data was correctly entered. For confidentiality, the computer in which the data was stored was password protected and the information was accessible only to the researcher. Data was backed-up in an external hard drive and email box. The data was then imported into Microsoft excel spreadsheet for cleaning/editing.

2.4 Data analysis

Analysis was done with respect to contraceptive prevalence use over the years of study. The influence of age, parity and marital status was considered on the choice and patterns of contraceptive use. Data was analyzed with social science package statistical software (SPSS) version 21, Pearson Chi-square test was used as test of significance where applicable and a P value <0.05 was considered statistically significant.

2.5 Ethical and administrative considerations

Ethical approval was obtained from the Institutional Review Board of the Faculty of Health Sciences (IRB-FHS No: 765-03) of the University of Buea. The administrative approval was obtained from the managers of the various health facilities and the from Regional Delegate of Public Health for the North West Region of Cameroon.

3. Results

3.1 Uptake of contraceptive methods

We obtained data from four health facilities that is Banso Baptist Hospital, Kitiwum Integrated Health Centre, Kumbo_Urban Medicalised Health Centre and Melim Integrated Health Centre in the Kumbo West Health District-KWHD of Cameroon. It is worthy to note that in the health facilities, incomplete records on family planning (FP) especially for adolescents were observed. We didn't include records that were incomplete. Due to illegal health care practice, we found that some of these health facilities actually had active family planning units across the years but when they administered FP to the adolescent girls, it was not registered in the hospital records as money was collected at individual levels (Private practice schemes). Such acts impede the health systems functioning and obviously affects the quality of data. Within the study period (2012-2017), 95 adolescent girls visited and obtained various forms of contraceptives from the Family planning units while a total of 886 adolescent girls visited the general gynaecology outpatient departments; giving a contraceptive uptake of 10.7% (Figure 2). The available modern methods of contraception at the centers were: Intrauterine Contraceptive Device (IUD) insertion, jadelle insertions, Progestin injections, Pills, implants, manual vacuum aspiration and condoms.

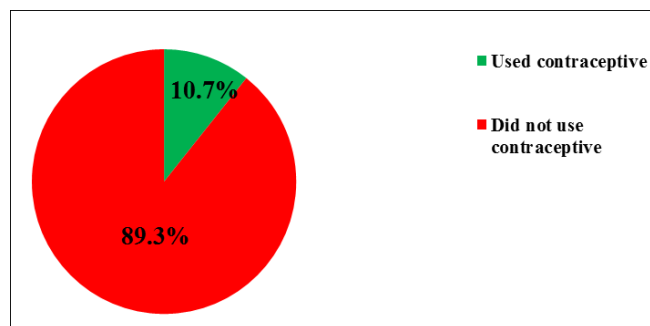


Figure 2: Uptake of contraceptives among adolescent girls visiting the family planning units, Kumbo West Health District, 2012-2017.

3.2 Contraceptive options and uptake from family planning unit

Table 1 shows the frequency of various contraceptive methods obtained at the health facility over the study period.

Twenty-six (27.4%) of the clients opted for Intrauterine Device (IUD) followed by the progestin injections (26.3%). Less popular were implants (3.2%) and manual vacuum aspiration (4.2%).

Contraceptives	Frequency	Percentage (%)
Condoms	6	6.3
IUD insertions	26	27.4
Implants	3	3.2
Progestin injections	25	26.3
Jadelle insertion	21	22.1
Pills	10	10.5
Manual vacuum aspirator	4	4.2

Table 1: Contraceptive options and uptake, Kumbo West Health District 2019.

3.3 Variation of contraceptive uptake with sociodemographic factors

Table 2 shows a summary of variation of contraceptive uptake with sociodemographic factors over five years (2012-2017) retrospectively. From the table, we can see that Bansa Baptist Hospital got the highest number of adolescent girls who obtained contraception that is 85 (89.5%). This was due to the fact that, at the Kumbo West Health District, there was only one trained midwife specialized in administering FP to women. This contributed in many young women visiting the hospital for her services. Also, it shows that majority of those who obtained contraceptive were single and having a parity status that is 60.0% and 53.7% respectively.

Characteristic	Frequency	Percentage (%)
Age (years)	16.04 ± 2.2 (Mean ± SD)	10-19 (Range)
10-14	9	9.5
15-19	86	90.5
Marital status		
Single	57	60.0
Married	38	40.0
Parity		
0	51	53.7
≥ 1	44	46.3
Health area		
BBH	85	89.5
Kitiwum	1	1.1
Kumbo Urban	8	8.4

Melim	1	1.1
Year		
2012	22	23.2
2013	3	3.2
2014	1	1.0
2015	6	6.3
2016	22	23.2
2017	41	43.2

Table 2: Variation of contraceptive uptake with sociodemographic factors.

3.4 Variation of IUD, Jadelle and Progestin injection uptake by age, parity and marital status

Table 3, 4 and 5 shows the variation of IUD, Jadelle and Progestin injection uptake by age, parity and marital status. Table 3 and 4 indicates that IUD and jadelle uptake were not statistically significant with age, parity and marital status. However, Progestin injection uptake was statistically significant with parity as shown in Table 5.

Category	IUD uptake: n (%)		χ^2	p-value
	Yes	No		
By age (in years)				
10 - 14	3 (33.3)	6 (66.7)	0.178	0.673
15 - 19	23 (26.7)	63 (73.3)		
By parity				
0	15 (29.4)	36 (75.0)	0.231	0.548
≥ 1	11 (25.0)	33 (75.0)		
Marital status				
Married	10 (26.3)	28 (73.7)	0.035	0.851
Single	16 (28.1)	41 (71.9)		

Table 3: Variation of IUD uptake by age, parity and marital status, KWHD 2012-2017.

Category	Jadelle uptake: n (%)		χ^2	p-value
	Yes	No		
By age (in years)				
10 - 14	2 (22.2)	7 (77.8)	0.001	0.993
15 - 19	19 (22.1)	67 (77.9)		
By parity				

0	12 (23.5)	39 (76.5)	0.130	0.719
≥ 1	9 (20.5)	35 (79.5)		
Marital status				
Married	9(23.7)	29 (76.3)	0.092	0.76
Single	12 (21.1)	45 (78.9)		

Table 4: Variation of Jadelle insertion uptake by age, parity and marital status, KWHD 2012-2017.

Category	Progestin uptake: n (%)		χ^2	p-value
	Yes	No		
By age (in years)				
10 - 14	3 (33.3)	6 (66.7)	0.252	0.615
15 - 19	22 (25.6)	64 (74.4)		
By parity				
0	8 (15.7)	43 (84.3)	6.416	0.011
≥ 1	17 (38.6)	27 (61.4)		
Marital status				
Married	10 (26.3)	28 (73.7)	0.000	1.000
Single	15 (26.3)	42 (73.7)		

Table 5: Variation of Progestin injection uptake by age, parity and marital status, KWHD 2012-2017.

4. Discussion

4.1 Contraceptive uptake and its stakes

A contraceptive uptake of 10.7% among adolescent girls shows that uptake is low. This phenomena of low contraception uptake among adolescents had been reported by Ann et al. [11] of the Guttmacher Institute that a great proportion of adolescent girls than older women discontinued using a contraceptive method within a year or experienced contraceptive failure. In the samelight, contraceptive uptake is relatively low among the married (40%) compared to the single (60%). This may be due to the fact that married adolescents are less likely to source for contraception openly because of cultural and religious factors in this part of Cameroon [4]. It has been reported by Chandra et al. [12] that sexually active adolescents whether married/unmarried need contraception. Many adolescents in Low middle income countries face significant barriers in obtaining contraception as well as using them consistently and correctly [1].

4.2 Adolescent girls face significant barriers to accessing contraception

According to WHO 2018 [13], adolescent girls face significant barriers in accessing contraception including health worker bias and/or lack of willingness to acknowledge adolescent girls’ sexo-reproductive health needs, restrictive

laws/policies regarding provision of contraceptive based on age or marital status, and adolescent girls' own inability to access contraceptives because of knowledge, transportation, and financial constraints. Additionally, adolescent girls face barriers that prevent use and/or consistent and correct use of contraception, even when they are able to obtain contraceptives: stigma surrounding non-marital sexual affairs and/or contraceptive use; fear of side effects; lack of knowledge on correct use; and factors contributing to discontinuation (for example, laxity to go back and seek contraceptives because of negative first experiences with health care providers, changing reproductive needs, changing reproductive intentions) [5, 6].

4.3 Sexual debut and contraception

Though the sexual activity of adolescents (ages 10-19) varies markedly for boys versus girls and by countries, a significant number of adolescents are sexually active; such that other studies have reported sexual activity increases steadily from mid-to-late adolescence [6, 14]. This is reflected in the study as only 9.5% of early adolescents visited the family planning unit for contraception, an indication for sexual debut compared to late adolescents (90.5%).

4.4 Available contraceptive methods

From the available contraceptive methods, IUD was the most popular choice accounting for 27.4% of the clients, followed by the injectables (26.3%), then the jadelle insertions (22.1%) and pills (10.5%). Less popular were Condoms, manual vacuum aspirator and implants (6.3%, 4.2% and 3.2%). This may probably reflect the relative availability of each method and cost variations. Adolescent girls in Africa including Cameroon have an unmet need for contraception, which can contribute to poor reproductive health outcomes as reported by Wirsyi et al. [6] and Gottschalk and Ortayli [15].

5. Conclusion

It is worthy to re-iterate that, adolescent girl's fertility regulation and pregnancy prevention is an important health-care issue of the twenty-first century. Significant numbers of adolescent girls experience the negative health consequences of early unintended pregnancy, unsafe abortions, unprotected sexual activity, pregnancy-related mortality and morbidity and Sexually Transmitted Infections; including its social and economic costs. Enhancing access to and use of contraceptives needs to be a key component of an overall strategy to preventing adolescent pregnancy. Effective and sustainable interventions to improve access and use of contraception include building community support for the provision of contraception to adolescent girls, providing sexo-reproductive health education within and outside school settings, enacting/implementing laws and policies requiring the provision of sexo-reproductive health education and contraceptive services for adolescent girls, integrating family planning services with other health services, and providing contraception through a variety of outlets and increasing the access to and use of contraception by making the health services adolescent-friendly. Emerging data on sexo-reproductive health suggest mobile phones as well as social media are promising means of increasing contraception uptake among adolescent girls. Also, family planning is a veritable tool in the efforts geared at improving maternal health, reducing maternal and under-five mortality. To reach these goals, there is a need to improve access,

availability and delivery of family planning services across the nation especially for all adolescent girls in their reproductive age group and their partners.

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Authors' contributions

FSW as Principal Investigator, designed and executed the research study. FSW and EVY analysed and interpreted the data. FSW and EVY wrote the manuscript, reviewed and approved the final manuscript.

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Disclaimer

The views expressed are those of the authors.

Competing Interests

The authors declare no conflicts of interest.

Ethics Approval

The study was approved by the Institutional Review Board of the Faculty of Health Sciences, Buea in Cameroon under study number 765-03.

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