

Research Article

Adolescent Pregnancy in Cameroon: A Five Year Retrospective Chart Review to Determine its Prevalence

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Abstract

Background and aim: Adolescent pregnancy remains a major determining factor of maternal and child mortality, and to vicious cycles of poverty and ill-health. It is in this light that, we sought to determine the prevalence of adolescent pregnancy in the Kumbo West Health District of Cameroon.

Methods: This was a retrospective chart review. A retrospective record of adolescent girls who attended the general gynaecology outpatient departments as well as family planning units of six health facilities in the Kumbo West Health District of Cameroon were reviewed for a 5 year period (2012-2017). Data was analyzed with SPSS version 21.

Results: Within the study period (2012-2017), out of 950 records, 886 adolescent girls visited the general gynaecology outpatient departments for pregnancy issues. We got a total of 750 recorded confirmed cases of adolescent pregnancy over the years out of a total of population of 25120 adolescent girls that make up the Kumbo West Health District (KWHD) population. This gave us an adolescent pregnancy prevalence of 26%.

Conclusion: The study area has a high adolescent pregnancy rate compared to other communities in Cameroon. Our results suggest that a guide and the formulation of the content of future adolescent-friendly preventive and control programmes should be considered. These programmes would be able to enhance a more practical response to addressing adolescent pregnancies and thus guide the progress towards curbing its incidence in Cameroon and particularly in the study area. Also, a mhealth intervention is urgently needed in the study area.

Keywords: Prevalence; Adolescents; Pregnancy; Kumbo West Health District; Cameroon

1. Introduction

The World Health Organisation (WHO) has established that; each year, approximately 21 million girls aged 15-19 years and 2 million girls who are aged under 15 years become pregnant in developing countries [1]. In the same light, an estimate of 16 million girls aged 15-19 years and 2.5 million girls under the age 16 years give birth in these developing countries of the world [2]. Though the global adolescent birth rate has reduced from 65 births/1000 women in 1990 to 47 births/1000 women in 2015 [3], there still remain a huge public health gap to fill. Despite this general progress, as the worlds' population of adolescent girls continues to grow, probability models indicate the number of adolescent pregnancies will increase globally by the year-2030, with the greatest proportional increases in Central, West, Southern and Eastern Africa [3]. Adolescent girls are more vulnerable and are growing up in a context marked by limited educational opportunities, weak social controls, pervasive poverty, widespread conflicts and high Human Immunodeficiency Virus (HIV) prevalence [4]; all pre-disposing factors to poor sexo-reproductive health (SRH) outcomes.

Adolescent pregnancy remains a major determining factor of maternal and child mortality, and to vicious cycles of poverty and ill-health [1, 5]. Childbirth complications and Pregnancy and are the leading cause of death among 15-19 year-old girls globally, with low and middle-income countries accounting for 99% of global maternal deaths of women aged 15-49 years [6]. Child mothers (aged 10-19 years) face higher risks of puerperal endometritis, eclampsia and systemic infections than women aged 20-24 years [7]. Furthermore, the emotional, psychological and social needs of pregnant adolescent girls can be greater than those of other women [1]. Early childbearing has been shown to increase risks for newborns, as well as young mothers. In low- and middle-income countries, babies born to mothers under 20 years of age face higher risks of severe neonatal conditions, low birthweight and preterm delivery [8]. Newborns born to child mothers are also at greater risk of having low neonate birth weight, with long-term potential effects [8].

A qualitative study carried out in KWHD of Cameroon by Wirsy et al. [9], reported that knowledge on sexo-reproductive health issues is low among adolescent girls, including both child mothers as well as pregnant adolescents with majority of them obtaining information on sexo-reproductive health from their peers. The problem of inadequate sexo-reproductive health education in schools is a reality [10]. Also, engaging in premarital sex and having multiple sexual relationships is common [10]. Equally it was established that, adolescent girls engaged in unprotected sexual practices as a way of earning money and for a living [11]. Drinking sachet whisky, concoctions and mixture of dry marijuana with water were identified as local methods employed by adolescent girls to induce abortion [9]. To maintain sexo-reproductive health, adolescent girls need affordable, effective, safe and acceptable contraception method of their choice as well as access to accurate information on SRH [10]. However, due to a host of diverse factors, adolescent girls are pre-dispose high risk of adverse sexo-reproductive health outcomes, including sexually transmitted infections, including HIV, unintended pregnancy, risky/unsafe abortion that can lead to death [12]. Should they give birth, adolescent girls are also at elevated risk for poor health outcomes for themselves and

their newborns, including at the extreme, death [1]. We therefore sought in this study to determine the prevalence of adolescent pregnancy in the Kumbo West Health District.

2. Methods

2.1 Study design

This was a retrospective chart review carried out in April 2018 in the Kumbo West Health District, a semi-urban/rural community made up of 11 health areas, Figure 1 shows the map of Kumbo West Health District in Cameroon. The target population were adolescent girls both early and late adolescents aged 10-14 years and 15-19 years respectively. Young girls who were not in the age range of 10-19 years and were not resident in the selected communities for the study were excluded.

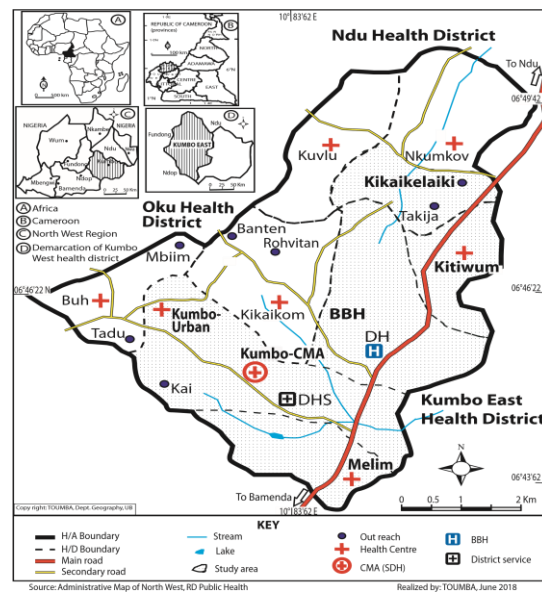


Figure 1: Map of the Kumbo-West Health District.

2.2 Sampling

Multi-stage cluster sampling was used to select 6 health facilities from the Kumbo West Health district namely Banso Baptist Hospital, Kikaikelaiki Integrated Health Centre, Kitiwum Integrated Health Centre, Kumbo_Medicalised Centre, Kumbo_Urban Integrated Health Centre and Melim Integrated Health Centre in Bui division of the North-West region of Cameroon. The available health records were then reviewed as we could find in these health facilities. Kumbo which is the second-largest community in Bui Division is found in the North West region of Cameroon.

2.3 Data management

Research structured forms as well as work books 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 obvious errors, completeness and inconsistencies for corrections. Data collected was entered daily into a template

(electronic questionnaire) created in Epi info version 7 by the investigator. Also, 10% of data entered during the entry process, was checked at the beginning to ensure that the data was correctly entered. The computer in which the data was stored was protected by a password and the information was accessible only to the principal investigator. Data was backed-up in an external hard drive and email box. The data was then imported into Microsoft excel spread sheet for cleaning/editing.

2.4 Data analysis

Analysis was done with respect to adolescent pregnancy prevalence use over the years of study. Data was analyzed with social science package statistical software (SPSS) version 21.

3. Results

Out of a total 950 records reviewed, 886 met the inclusion criteria. Table 1 summarises the 886 adolescent girls who visited the gynaecology outpatient departments for reproductive purposes within the study period (2012-2017) of 6 health facilities within the Kumbo West Health District we carried out the study. From table 1, majority of participants were late adolescents (65%), majority single (60.7%), and most of them attended the Bansa Baptist Hospital which constitutes a health area (44.4%). Also, as the years went by that is from 2012 to 2017 there was an increase of adolescent girls visiting the health facilities that is from 4.7% to 28.6%.

Characteristic	Frequency	Percentage (%)
Age (years)	16.04 ± 2.2 (Mean ± SD)	10-19 (Range)
10-14	310	35.0
15-19	576	65.0
Marital status		
Single	538	60.7
Married/cohabiting	348	39.3
Health area		
BBH	393	44.4
Kekaikilaiki IHC	61	6.9
Kitiwum IHC	48	5.4
Kumbo MC	163	18.4
Kumbo Urban IHC	197	22.2
Melim IHC	24	2.7
Year		
2012	42	4.7
2013	43	4.9
2014	147	16.6
2015	179	20.2

2016	222	25.1
2017	253	28.6

BBH-Banso Baptist Hospital; IHC-Integrated Health Centre; MC-Medicalized Centre

Table 1: Summary of Socio-demographic characteristics of the participants (n=886), 2012-2017, Kumbo West Health District.

3.1 Sexual and Reproductive characteristics of the participants

Within the study period (2012-2017), 886 adolescent girls visited the general gynaecology outpatient departments for pregnancy issues. We got a total of 750 recorded confirmed cases of adolescent pregnancy (Table 2) over the years (2012-2017) out of a total of population of 25120 adolescent girls that make up the KWHD population. This gave us an adolescent pregnancy prevalence of 26%. Figure 2 shows this overall adolescent pregnancy prevalence. Also, from the table 2 in which there were 618 deliveries by adolescent mothers, we got an adolescent birth rate of 21.8% in the KWHD.

Parameters	Frequency	Percentage (%)
Pregnancy	750	84.7
Deliveries	618	82.4
HIV cases	16	1.8
Other STI	25	2.8
Pregnancy complications	20	2.3

Table 2: Sexual and Reproductive characteristics of participants (n = 886), 2012-2017, Kumbo West Health District.

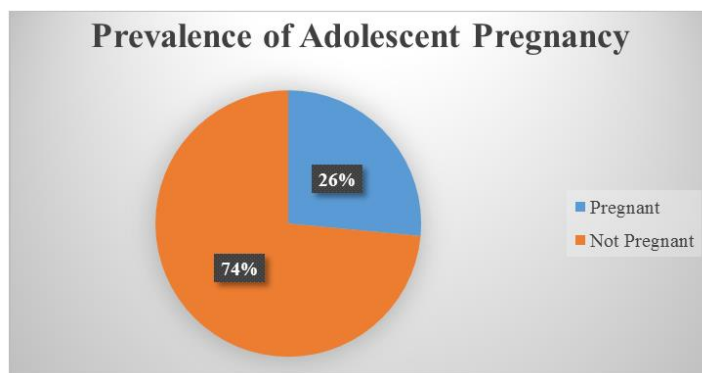


Figure 2: Overall prevalence of Adolescent pregnancy, 2012-2017, Kumbo West Health District.

4. Discussion

Adolescent pregnancy remains a significant public health challenge and a developmental setback, especially in sub-Saharan Africa, where high rates have been reported with a resultant significant morbidity and mortality [13]. Also,

WHO [1] has reported adolescent pregnancy remains a major determining factor of maternal and child mortality, and to vicious cycles of poverty and ill-health. In the study area, we had an adolescent pregnancy prevalence of 26% and adolescent birth rate of 21.8%. The UNFPA [14] reported an adolescent birthrate of 119 births per 1000 adolescent girls aged 15-19 years in Cameroon. UNICEF [15] reported 128 births per 1000 adolescent girls in Cameroon. A study in Cameroon [16] reported that, the prevalence of adolescent deliveries was 8.7% (77/886) (95% CI 7.0-10.7%). Also, it was reported 11.6% of adolescents were multiparas compared to 73.9% of their adult counterparts [16]. Taking a critical look at the adolescent pregnancy prevalence in the study area compared to the study by Njim and Agbor [16], we can see that it is relatively higher. Adolescent pregnancy has serious implication for poor academic performance, poverty and consequent dropout of school [17]. Evidence has shown that interventions which are oriented towards youth development and which respect adolescent girls as autonomous individuals are more successful in attracting them to health services, thus enhancing STIs including HIV prevention, and the prevention early pregnancy as well as childbearing which all pre-disposes them to poor reproductive outcomes [11].

5. Conclusion

Our results suggest that a guide and formulation of the content of future adolescent-friendly preventive and control programmes should be considered. The study area has a high adolescent pregnancy rate compared to other communities in Cameroon. Our results suggest that a guide and formulation of the content of future adolescent-friendly preventive and control programmes should be considered. These programmes would be able to enhance a more practical response to addressing adolescent pregnancies and thus guide the progress towards curbing its incidence in Cameroon and particularly in the study area. Consequently, these will facilitate the overall attainment of the Sustainable Development Goals (goals 1, 2, 3 and 4). Though some progress is being made, many SRH care programmes continue to inadequately respond to the needs of adolescent girls. Many programmes for adolescents are small, and are often initiated by non-governmental organisations on trial basis. Nevertheless, of recent there has been an increase in reproductive health interventions targeting adolescents initiated by the United Nation Agencies and the lessons learned from such interventions will be very useful in developing large-scale programmes with focus on improving adolescent SRH globally and particularly in Africa by its governments.

Some initiatives on adolescent SRH often end because once the external funding is finish, the intervention stops. The results of this research necessitate that certain measures should be taken in order to prevent adolescent pregnancy. The researcher therefore offers the following recommendations which can be of tremendous use if adhered to. Parents should be watchful on the type of companies their children keep and encourage them to bring their friends home. The Cameroon Government should employ more Health Educators/Guidance Counsellors and post them to schools to intensify education/counselling of youths on adolescent pregnancy and how it can be prevented. In the same light, the Government should establish a rehabilitation centre to rehabilitate adolescents that fall victim of pregnancy. Also, contraceptive services should be readily available to the rural population; including young people's access to such facilities. This would help in preventing cases of adolescent pregnancies and the

spread of sexually transmitted infections. A mobile health intervention is equally important to reduce the prevalence of adolescent pregnancy in the study area.

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Ethical Considerations

Ethical approval was obtained from the University of Buea Institutional Review Board of the Faculty of Health Sciences (No: 765-03). The administrative approval was obtained from the necessary authorities.

Authors Contributions

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

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Disclaimer

The views expressed are those of the author.

Competing Interests

The author declares 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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