

# Preconception Care In Cameroon: Where Are We?

L Mbuagbaw, P Okwen, D Enyama, J Mayouego

## Citation

L Mbuagbaw, P Okwen, D Enyama, J Mayouego. *Preconception Care In Cameroon: Where Are We?*. The Internet Journal of Gynecology and Obstetrics. 2006 Volume 8 Number 2.

## Abstract

Preconception care (PCC) is associated with improved pregnancy outcomes. Our objectives were to evaluate the need for PCC and the level of consumer awareness. A study was performed on consecutive patients presenting to primary and secondary care practices in two provinces in Cameroon. A total of 236 women aged 15 to 45 years were included. 36.4% of pregnancies had unfavorable outcomes, up to 20.3% had difficulties in getting pregnant and 29.7% had carried unwanted pregnancies. Very few women had ever done tests for diseases that could affect pregnancy and childbirth. We found some significant knowledge deficiencies about factors that may threaten maternal fetal health. 30.8% admitted to suffering domestic violence. There is an urgent need for the implementation of PCC in Cameroon. Many pregnancies are unplanned and frequently end up unfavorably. The rate of unwanted pregnancies is equally elevated. Consumer awareness is extremely low and domestic violence is high.

## INTRODUCTION

Preconception health care is an essential component of reproductive health which focuses on the conditions and risk factors that could affect a woman if she becomes pregnant. A large proportion of pregnancies are unwanted and unplanned for in developing countries especially in places where women have little say in family planning and some forms of contraception are unavailable or unacceptable. Preconception health care is encouraged by all promoters of reproductive health. Nurses have provided this holistic health care since the early 1900s and its various components and methods for promoting them have been developed over the decades. (1)

The CDC (Centre for Disease Control) published a list of recommendations to improve preconception health and health care, which among others advocates research on preconception and increasing of consumer awareness. (2)

No baseline data is available on the concept in developing countries. Preconception care is associated with improved pregnancy outcomes. It is recommended that primary care providers assess all women of reproductive age for their preconception risk conditions and provide or refer individuals for interventions as appropriate. (3)

## OBJECTIVES

Our objectives were to evaluate the awareness of Cameroonian women on the need for preconception health

care, to introduce the concept and to counsel 200 women of reproductive age. This study is also aimed to serve as a baseline for further research and policy implementation.

## METHODS

We carried out a prospective descriptive study from April 2007 to July 2007 in the Bafut District Hospital and the Baffoussam Provincial Hospital, giving us access to both rural and urban populations in English and French speaking Cameroon in the West and North West Provinces. All women aged 15 to 45 years who came to these clinics during the study period were interviewed and counseled according to their willingness to participate. Written consent was obtained from all the subjects for exploitation of the data collected and ethical clearance was obtained from the local health authorities.

We excluded women who were pregnant and already attending antenatal clinics. Those included were interviewed using a pre-tested and adapted questionnaire. Information concerning their demographic data and pregnancy plans was collected. Their awareness on certain preconception interventions were noted. All women were counseled on preconception care and encouraged to adopt reproductive plans.

## RESULTS

We sampled a total of 236 women aged between 15 and 45 years. The most represented age group (37.3%) was that of

women aged 25 to 29 years and the least represented was that of women aged 40 to 44 years (1.7%). 50.8% (120/236) resided in suburban areas and 16.1% (38/236) resided in rural areas. Only 2.5% (6/236) had more than 5 children, while 12.7% (30/236) didn't have any children. 63.6% (150/236) had never had a pregnancy with an unfavorable outcome (abortion, infant death, low birth weight or premature birth).

55.1 % (130/236) were planning for a pregnancy and only 20.3% (48/236) had any difficulty getting pregnant. 50.8% (120/236) were practicing or had practiced family planning (all forms were taken into account). 29.7% (70/236) had carried an unwanted pregnancy. (Table 1)

**Figure 1**

Table 1: Reproductive life of study population

Questions on reproductive life	Positive answers	
	Number	Percentage
Plans for pregnancy	130/236	55.1%
Difficulty in getting pregnant	48/236	20.3%
Family planning	120/236	50.8%
Unwanted pregnancy	70/236	29.7%

14.4 % (35/236) had never done an HIV (Human Immunodeficiency Virus) test. 46.6% (110/236) had never done tests for other Sexually Transmitted Infections (STIs). Only 7.6% (18/236) had done a hepatitis B test and 20.3% (48/236) had done a fasting blood sugar test (table 2)

**Figure 2**

Table 2: Test for infectious and chronic diseases done in study population

Test	Done the test	
	Number	Percentage
HIV	202/236	85.6%
STD ( Chlamydia and syphilis)	126/236	53.4%
Hepatitis B	18/236	7.6%
Diabetes	48/236	20.3%

Up to 79.7% (188/236) knew their blood groups, but only 61% (144/236) had ever received folic acid supplementation (tables 3 and 4).

**Figure 3**

Table 3: Number of women who know their blood group

Knowledge of blood group	Frequency n= 236	Percent
No	48	20.3%
Yes	188	79.7%
Total	236	100.0%

**Figure 4**

Table 4: Number of women who have ever used folic acid

Use of folic acid	Frequency n= 236	Percent
No	92	39.0%
Yes	144	61.0%
Total	236	100.0%

54.2% (128/236) were aware that alcohol was detrimental to mother and child health, 52.5% (112/236) for tobacco, 54.2% (128/236) for obesity, and only 38.1% (90/236) for High Blood Pressure (table 5).

**Figure 5**

Table 5: Preconception risk factor awareness in study population n= 236

Risk factor	Aware of risk	
	Number	Percentage
Tobacco	112/236	52.5%
Obesity	128/236	54.2%
Alcohol	128/236	54.2%
High Blood Pressure	90/236	38.1%

30.8% (72/236) admitted to experiencing domestic violence at home (table 6). A total of 232 (98.3%) women were counseled on preconception care.

**Figure 6**

Table 6: Number of women experiencing domestic violence

Women who experience domestic violence	Frequency n= 236	Percent
No	162	69.2%
Yes	72	30.8%
Total	236	100.0%

**DISCUSSION**

The ages of the women included in the study presents a picture of the women who really visit the health institutions in question. Women aged from 25 to 29 are those who visit the hospitals most often, irrespective of their presenting

complaint. Women residing in suburban areas represent up to half of the study population, mostly because a large part of Cameroon is suburban. Most of the women seen had either 2 or 3 children. This is in contrast with the fertility index of Cameroon which is 5 children per woman. (4)

63.6 % (150/236) have had uneventful pregnancies, leaving us with 36.4% of our study population who have had pregnancies with unfavorable outcomes. This might be a good index to exploit in the evaluation of preconception care interventions and also expresses the need for these interventions. 55.5% were planning to get pregnant at the time of the study. This value is fairly similar to 47.2% found in an American study. (5) It might be interesting to find out what measures they have been taking to ensure maternal and fetal health before and during pregnancy. Up to 20.3 % expressed difficulty in getting pregnant. An in depth study of the situation will be necessary to elucidate the true nature of this complaint. 50.8% were practicing family planning (all forms inclusive). The number of women reported to be practicing any method of family planning in Cameroon in 2004 was reported to be 26%. (4) 29.7 % had harbored an unwanted pregnancy. This is a high rate of unplanned reproductive life.

Only 85.6% had ever done an HIV test, a result which is particularly disappointing, considering the massive sensitization campaigns that have been carried out in the country over the past few years. Only 53.4% had ever been tested for other STDs, 7.6% for hepatitis B and 20.3% for diabetes. These results are equally alarming especially in a country where coverage with antenatal care is up to 80%. (6)

79.7% were aware of their blood groups. Only 61% had ever received folic acid. This can be explained by the fact that knowledge of periconceptional folate in health workers has been reported to be only 39.0%. (7)

The study population demonstrated low awareness of certain risk factors, such as tobacco consumption (52.5%), alcohol usage (54.2%), obesity (54.2%), and hypertension (38.1%) as compared to women in the USA. (5) Up to 30.8% admitted to suffering domestic violence. This just goes to say how much the spouses should be involved in preconception care interventions.

Unfortunately, 4/236 women were willing to take the questionnaire but did not stay for preconception counseling.

## CONCLUSION

There is an urgent need for the implementation of preconception care in Cameroon. Many pregnancies are unplanned and frequently end up unfavorably. The rate of unwanted pregnancies is equally elevated. Very few women are tested for infectious diseases and diabetes. Consumer awareness is extremely low and domestic violence is high.

We think that preconception care should be added to the other health care programs already in place and should be implemented at primary, secondary and tertiary levels so as to improve maternal and perinatal outcomes. The CDC recommendations (2) should be taken into consideration, adapted to local settings and applied. In service training can be used to build service provider capacity. Annual well woman hospital visits should be introduced. One emerging policy is the role of preconception care as a complement to prenatal care. (8) Some health care workers in Japan maintain that residents and medical students should be trained in PCC. (9)

A multidisciplinary approach may also be helpful in reaching a larger number of women. Social services can play a role in the reduction of domestic violence.

Research in this domain should be encouraged especially as to why these services are not provided routinely, what health care providers in Cameroon think about PCC, what consumers expect to be taught, by whom and at what period of their reproductive lives.

## References

1. Debra Hobbins MSN, APRN, NP (2003) Full Circle: The Evolution of Preconception Health Promotion in America *Journal of Obstetric, Gynecologic, & Neonatal Nursing* 32 (4), 516-522. doi:10.1177/0884217503255089
2. Center for disease control. Recommendations to Improve Preconception Health and Health Care. (MMWR 2006;55(No. RR-6)
3. U.S. Department of Health and Human Services. Healthy people 2000: National health promotion and disease prevention objectives. Washington, DC: U.S. Government Printing Office; 1991.
4. Institut National de la Statistique. Enquete demographique de la sante du Cameroun- 2004. EDSC III.
5. Keith A. Frey, Julia A. Files. Preconception Healthcare: What Women Know and Believe. *Matern Child Health J.* 2006 September; 10(Suppl 7): 73-77.
6. US Agency for International Development. Demographic and Health Surveys: Cameroon [online resource]. Calverton (MD): Measure DHS; 1998. Available from: <http://www.measuredhs.com>
7. Alan TN Tita, Beatrice J Selwyn, D Kim Waller, Asha S Kapadia, Sylvestre Dongmo. Evidence-based reproductive health care in Cameroon:

population-based study of awareness, use and barriers  
Bulletin of the World Health Organization 2005;83:895-903.  
8. Atrash H, Adams M, Cordero J, Howse J.  
Time to act on missed opportunities to improve perinatal  
outcomes. Mat Child Health Journal; 2006: September;

10(Suppl 7): 37-42.

9. Kazuya Kitamura, Michael D Fetters, Nobutaro Ban  
Preconception care by family physicians and general  
practitioners in Japan. BMC Family Practice 2005, 6:31  
doi:10.1186/1471-2296-6-31

**Author Information**

**Lawrence C.E. Mbuagbaw**

General Practitioner, Bafut District Hospital

**Patrick Mbah Okwen**

General Practitioner, St Theresa's Catholic Medical Centre

**Dominique Enyama**

General Practitioner, Baffoussam Provincial Hospital

**Jeanne Kouam Mayouego**

Baffoussam Provincial Hospital