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Original Research Article

# Contraception among Women of Reproductive Age in the Santa Health District, Cameroon

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The persistently high maternal and infant morbidity and mortality rates in Cameroon are known to be in direct relationship with family planning and child spacing, especially among the young females of reproductive age (Strategies for Growth and Employment, 2000; and Health Sectorial Strategy, 2009). In the Santa Health District, the number of women who had access to family planning compared to the target from June 2006 to June 2008 was still very low -13% (Health Sectorial Strategy, 2009). That is why there is a high prevalence of adolescent pregnancies and illegal abortions (MICS, 2006). The aim of this study was to explore the socio-behavioral determinants that are responsible for the low utilization of family planning services in the Santa Health District. It was a descriptive cross sectional and comparative design in which "BEHAVE" was used to analyze the determinants between users and non-users of family planning services in the health district in order to come up with concrete and sustainable solutions. The key findings from this study confirmed that unmet family planning needs are a root cause of maternal and infant morbidity and mortality in the Santa health district given that many women of child-bearing age would like to adopt family planning behaviors but they encountered several barriers. Spousal influences remained the key deterrents. That is why myths and unfounded concerns raised by male partners and religious bodies should be addressed.

Keywords: Contraception, Women, Reproductive, Health, Age.

# INTRODUCTION

Family planning refers to the use of contraceptives or natural techniques for child spacing and avoidance of unwanted pregnancies. Modern methods of contraception include the pill, female and male sterilization, IUCD, injectables, implants, male and female condoms, diaphragm, and emergency contraception. Traditional methods include periodic abstinence, withdrawal and folk methods. Family planning (FP) is lauded for being one of the great public health achievements of the last century, but yet over 200 million women worldwide who want to use contraceptives don't have access to them (USAID, 2006).

The world's poorest women are not empowered to decide the number of children and timing of their births, even though complications of pregnancy and childbirth are a leading cause of maternal morbidity and mortality (Harries et al, 2009). The World Health Organization (WHO) states that more than 120 million women worldwide want to prevent pregnancy, but they and their partners are not using contraception (Plea S, 2011). To achieve their child-bearing preferences, women and their spouses need effective contraception to prevent unintended pregnancies. Voluntary family planning empowers women and men to decide when to have a child and to avoid unintended pregnancies and abortions. It is an effective means of controlling fertility within the human rights framework by giving couples the ability to have their desired family size (Prata, 2007).

Sub-Saharan Africa is still characterized by high levels of fertility and unmet contraceptive needs. It has the lowest family planning use in the developing world. The use of modern methods by married women is higher in Latin America (63%), followed by Asia (48%, excluding China) and sub-Saharan Africa (18%). The current contraceptive level in sub-Saharan Africa represents a

\*Corresponding Author: Ndipowa James Attangeur Chimfutumba. Department of Nursing, Cameroon Christian University, Bali, Cameroon. E-mail: ndipowajames@gmail.com modest increase from 13% registered around the late 1990s to the beginning of 2000. According to recent available data from 31 countries with Demographic and Health Surveys (DHS), about 30 per cent of women in sub-Saharan Africa have an unmet need for modern family planning methods. Nineteen of the 31 countries have a reported unmet need for family planning up to 49 per cent. Averagely, sub-Saharan Africa has not seen a reduction in the unmet needs for family planning in the last decade. As a result, there are more women (25 million) with an unmet need for family planning than women currently using modern family planning methods (18 million).

Cameroon, located in the Central African Sub Region, has a population of close to 20million people with about 44% younger than 15 years of age. Fertility is high, with a total fertility rate of approximately 4.9 lifetime births per woman. Total Fertility Rate (TFR) fell slightly from 5.1 births per woman in 2009 to 5.0 births per woman in 2010. However, Wide disparities exist with the TFR of women in the lowest wealth quintile (6.5 births per woman) twice that for women in the highest wealth quintile (3.2 births per woman). Similarly, the TFR for women in urban areas is 4.0 compared to those in rural areas at 6.1, and those with no education at 6.3 compared to those with secondary or more education at 3.5 (Fiub, 2006).

In Cameroon, until the 1980's, the government had a proannalist policy supported by measures that encouraged births. As a result, the nation had an increased number of births, many of which were unintended, and thus in 1988 the government launched an awareness-raising effort in a bid to reduce the birth rate. This campaign highlighted the difficulties that resulted from an imbalance between existing resources and large families, and therefore encouraged responsible parenthood (Jackson, 2013). Despite recognition of the consequences of high fertility rates, especially the huge numbers of unintended births, reproductive health indicators in Cameroon remain meager.

According to the 2011 Cameroon Demographic Health Survey (DHS), the total National Fertility Rate (NFR) is 5.1; lower than the 1991 rate of 5.8 and the 1998 rate of 5.2, yet an increase from the 2004 rate of 5.0. The contraceptive prevalence rate is 14%, meaning that only 14% of reproductive women aged 15-49 use a modem contraceptive method, with the male condom being most popular. Although this number is higher than in previous years, it only represents a 10% increase over a 20 year period, from 4% in 1991. The Central Region and Litoral have the highest modern contraceptive prevalence rates (25% and 24%, respectively) but there are still significant unmet needs.

Approximately  $\overline{3}$  out of 5 married women either want to have another child later in life or do not desire to have any more children at all, representing a significant number of women who may benefit from family planning if they haven't done so yet (Fiub, 2006). Unmet needs for family planning services among married women are enormous, with a national rate of 19.7%. The majority of women have an unmet need for family planning to space births (13.3%) but the percentage that would like to limit births entirely is significant as well (6.4%).

When one compares unmet needs by region, the Center Region / and the Litoral Region have the lowest unmet needs of 16%, but this is still very high considering that this number represents about 1 in 5 women. This is sufficient evidence that women throughout Cameroon desire family planning services, but a reasonable number of them have not yet had access to these services even in large cities like Yaoundé and Douala where there is presumably greater access to family planning services. If all unintended births in Cameroon were avoided, the total fertility rate would be 4.1or even less instead of 5.1 children per woman. This is perhaps the greatest illustration of Cameroonian women's desire for family planning services (MICS, 2011).

At the time of the study, one out of four adolescent girls in Cameroon had already begun their reproductive life; 21% had at least one child and 4% were pregnant with their first child. Adolescent pregnancies pose other significant problems for young girls, since girls who become pregnant are likely going to drop out of school, and this may have lasting consequences throughout their life. The high rate of unmet needs for family planning coupled with the prevalence of adolescent pregnancy contributes to the pervasiveness of induced abortion. The Cameroon law prohibits abortion, except when the mother's life is at risk due to the pregnancy, and in cases of rape and incest. This inevitably obliges many reproductive women with an unintended pregnancy to resort to clandestine abortions, very often under unsafe conditions (USAID, 2006).

# CONCEPTUAL FRAMEWORK

This conceptual framework attempts to demonstrate how behavior-change communication works in family planning (Fig. 1). It is a strategic communication and behavior-change framework in which communication is treated as an external variable that affects the other variables in the model. Communication designed to improve skills is identified as "instruction"; communication for removing environmental constraints is identified as "advocacy"; and communication designed to change ideational factors is identified as "promotion". The model specifies how and why communication affects intention and behavior - indirectly through its effects on skills, ideation, and environmental constraints.

"Promotion" is central because it leads to ideational change (that is, a change in the way individuals or populations perceive given practices or behaviors). Promotion is designed to have cognitive, emotional, and social effects, which in turn influence a person's intention to practice a certain behavior. The actual behavior is the desired result in almost all Behavior-Change Communication programs, whatsoever the specific domain. Evaluators often label this behavior the "intermediate outcome" especially if measured at the population level. In a pre-post evaluation design, evaluators can compare baseline measures of these variables with post-intervention data.

They can also assess program effects on the ideational variables by comparing the level of each variable among the users and non-users of the behavior - in this case, the uptake of family planning methods. Even if one can convince individuals that certain courses of action are desirable, environmental constraints to behavior change often exist in the form of political barriers, resource limitations, legal constraints, etc. Advocacy becomes a powerful tool to confront these constraints at the macro level and to minimize barriers to positive behavior at the individual level (Woodward C, 2000).

#### METHODOLOGY

It was a descriptive cross sectional and comparative survey of the factors influencing family planning uptake among "Doers" and "Non-Doers" in the Santa Health District. There was a cross sectional survey of the health units using a semistructured questionnaire, focus group discussion, and also a key informant interview.

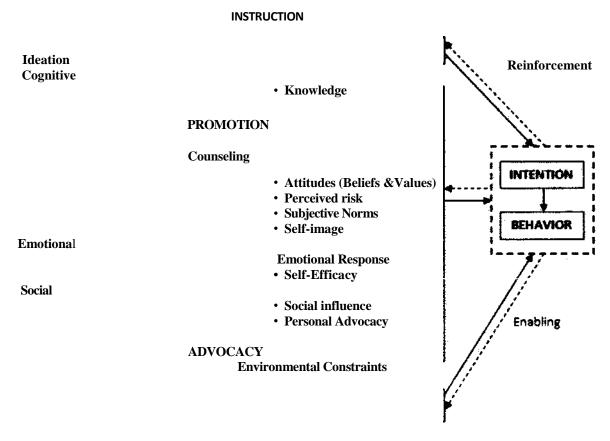


Fig. 1. Conceptual Framework

# Sampling Method

#### Selection of health facilities

Multistage sampling with stratification was done to select the health facilities under study. This method was preferable because the health facilities in the Santa health district are made of 3 strata, namely: the Public Health Facilities, 10 in number; the Mission Health Facilities, 2 in number; and the Private Health Facilities, 4 in number. A total of 8 out of the 16 available, functional and approved health facilities in the Santa Health District were selected proportionately using random sampling as follows:

- Public Health Facilities = 5
- Mission Health Facilities = 1, and.
- Private Health Facilities = 2.

This was to ensure an equitably representative sample for the study of 50% per stratum.

#### Selection of key informants

Purposive sampling was done to select 16 key informants from the 16 approved health facilities.

#### Sample Size Determination

n

The sample size was determined by the Fisher et al (1998) formula:

$$=\frac{Z^2P(1-P)}{d^2}$$
Fisher et al (1998)

Where: n = the desired sample size where the study population is equal to or greater than 10,000.

Z = Standard normal deviate corresponding to 95% level of confidence (= 1.96).

P = Estimated prevalence of characteristic of interest (unsound practices) (= 0.5). (Since that of the Santa Health District is not known).

d = Level of precision (set at  $\pm 5\%$ ).

Therefore,  $n = \frac{1.96x1.96x0.5x0.5}{0.05x0.05} = 384.16 = 384$  persons

The samples were distributed as follows:

Public health facilities = 240

Mission health facilities = 48

Private health facilities = 96

Sample size of 384+16 (key informants purposively sampled) = 400 women of childbearing age.

#### Sampling method

Random sampling, Purposive sampling and Convenience sampling were applied since many of the respondents such as the nomads and business operators were hard to reach. Qualitative Data was collected following Barrier Analysis (otherwise known as; "Doer"/ "Non-Doer" analysis). It is a rapid assessment tool used in community health and other community development projects to identify behavioral determinants associated with a particular behavior. It focuses on eight determinants, namely: perceived susceptibility, perceived severity, perceived action efficacy, perceived social acceptability, perceived self-efficacy, cues for action, perception of divine will, and positive and negative attributes of the action (i.e., the behavior).

# Key Findings

Majority of respondents (54.3%) were in the age range of 25-35years while the teenage group with age range 13-18years had the lowest percentage of family planning attendance of 8.2%.

# Level of contraceptive uptake

When asked if they would like to use family planning methods within the months ahead, 41.1% of non-users responded in the negative" NO" while only 10.7% of users also responded in the negative "NO". Meanwhile76.8% of users responded in the affirmative "Yes" as against 48.9% of non-users who also responded in the affirmative "Yes" (Fig. 1).

#### Determinants for "BEHAVE"

The two very strong determinants with regards to the advantages of family planning are child spacing and the fact that family planning allows for enough time to take care of the children. These determinants for the uptake of family planning have a higher percentage (65.6% and 60%, respectively) from women of child bearing age practicing family planning.

Generally there was no significant difference between what the users and non-users gave as the advantages of family planning. Both groups confirmed that child spacing is an advantage of family planning. With regards to the disadvantages of Family Planning, there was no significant difference between what the users and the non-users say are the disadvantages of family planning

Two strong determinants stand out here with users having a difference of up to 35.4% for the fact that family planning has no disadvantage and a good number of non-users affirmed that family planning is disadvantageous to their religious beliefs.

#### Self Efficacy

Accessibility to the health facility, counseling and reduced cost were the determinants that could facilitate non-users to increase the uptake of family planning. Here there is a significant difference between what the users and non-users say with a Pvalue < 0.05. For the users it was availability of all the methods, availability of long lasting methods and the convenience of the method (minimal side effects, how well it can be conceived from others, privacy, etc). There was also a significant difference between what the users and non-users say would facilitate the uptake of family planning. The non-users of family planning said that accessibility to the health facility and ill health related to side effects of the drugs were those factors that could make it difficult for them to consider the use of family planning in the months ahead. There exists a significant difference between what the users and the non-users stated as deterring factors. Those using FP stated that religious attributes and the side effects of the drugs were those factors that deter potential users of family planning methods.

The difference between the users and non-users for those who approved using family planning was statistically significant with a P-value ≤0.0005. On the one hand, for non-users, we have family members / parents and the healthcare provider (66.6%) stated as those who approve for them to use family planning. Parents and religious leaders were those that disapproved of family planning for the non-users while the fathers and mothers-in-law deterred users from continuing family planning.

#### Analysis of the role of Behavior-Change Communication

Interview of key informants was used to complement data collection. It was discovered that majority of modern contraceptive users were on short-acting methods, though they would have preferred the long-lasting methods. Those on oral pills and injectable methods had a high rate of non-compliance probably due to the fact that most of them came for the first dose, but hardly returned to the health facility for follow-up (86.7%). At the Santa District Hospital about 68.1 % of respondents preferred long-acting methods such as implants and IUCDs to the short-acting methods.

No respondent opted for the permanent method even if she found herself in a desperate or life-threatening situation. It is worth of note that majority of the respondents advanced three main reasons for the low uptake of contraceptives, namely: Contraceptive side effects, their religious beliefs and disapproval from their husbands (73.3%). This is a major indication for serious advocacy and lobbying in order that husbands and women should consider the benefits of contraception and child spacing, which outweigh the side effects, religious beliefs and myths, after all, women have the right to take up a contraceptive method discretely without necessarily seeking the approval of the partner, for it is the life of the woman that is endangered.

Nevertheless a negligible number of women saw accessibility as a major barrier because they preferred long-acting FP methods, but they were not available in most of the health facilities. Two key informants from the catholic health facilities said they do counseling on all the methods, but do not administer any modern family planning method. They would rather refer the client elsewhere if she chose to use a modern family planning method.

# DISCUSSION

From the study, the majority of respondents (54.3%) were in the age group 25-35years with a 95% confidence limit of 61. 2%, which indicated that more women aged 25-35years visit health facilities to sick family planning services. This corroborates with the Demographic Health Survey and Multiple Indicators in 2011 which reported the contraceptive prevalence rate (CPR) to have increased from age 15-19 to 20-24, and then declined to 13 percent among women 45-49 years between 2004 and 2011 in Cameroon (MICS 2011).

Table 1. Distribution of respondents according to age group (n = 400)

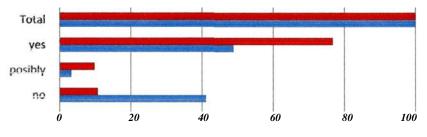
Age group	Number of cases	%	Cum %
13-18	35	8.75	8.75
19-24	92	23	31.75
25-35	217	54.25	86
36 plus	56	14	100.0
Total	400	100.0	100.0

Table 2. Distribution of respondents as to whether to prevent or avoid pregnancy (n = 400)

Are you doing something to prevent or avoid pregnancy?

	Freq.	Percent	Cum. %
No	171	42.7%	42.7%
Yes	229	57.3%	100.0%
Total	400	100.0%	100.0%

The respondents who were doing something to delay or avoid pregnancy were 57.3%.



Key: Red = % Doers; Blue = % Non-Doers

Fig 2. Would you like to use a family planning method in the months ahead? (n = 100)

What makes it easy	Non user	User	% difference	p-value
Accessibility	30	7	23	0.000
% Total	81.1	18.9	62.2	0.000
Availability of all methods	4	10	-6	0.000
% Total	28.6	71.4	-42.8	0.000
Availability of long lasting method	1	30	-29	0.000
% Total	3.2	96.8	-93.6	0.005
Availability of provider	2	0	2	0.000
% Total	100	0	100	0.000
Confidence in method	9	19	-10	0.000
% Total	32.1	67.9	-35.8	0.000
Convenient method	2	20	-18	0.000
% Total	9.1	90.9	-81.8	0.005
Counseling	12	2	10	0.000
% Total	85.7	14.3	71.4	0.005
Husband	1	2	-1	0.000
% Total	33.3	66.7	-33.4	0.000
Nothing	22	16	6	0.000
% Total	57.9	42	15.8	0.000
Reduced cost	7	6	1	0.000
% Total	53.8	46.2	7.6	0.000
Take decisions myself	1	0	1	0.000
% Total	100	0	100	0.000
TOTAL	91	112	-21	0.000
% TOTAL	44.8	55.2	-10.4	0.005

What makes it difficult	Non users	Users	% difference	P-Value
Accessibility	0	17	-17	0.000
% Total	0	100	-100	0.000
Cost	45	14	31	0.000
% Total	75.3	23.7	СТ	0.000
Fear of infertility	17	17	0	0.000
% Total	50	50	0	0.000
Husband	4	3	1	0.000
% Total	57.1	42.9	14.2	0.000
111 health	5	1	4	0.000
% Total	83.3	16.7	66.6	0.000
Religious reasons	8	29	-21	0.000
% Total	21.6	78.4	-56.8	0.000
Side effects	12	31	-19	0.000
% Total	27.9	72.1	-44.2	0.000
TOTAL	91	112	-21	0.000
% TOTAL	44.8	55.2	-10.4	0.000

Table 4. Difficulties encountered by women using family planning methods (n = 203)

**Table 5.** Approval for Family Planning Uptake (n = 204)

	Nonuser					
Who disapproves		User %	Difference	P-value		
Friends	12	9	3	0.000		
%	57.1	42.9	14.2	0.000		
Mother/father in-law	2	11	9	0.000		
%	15.4	84.6	15.4	0.000		
Nobody	19	71	52	0.000		
%	21.1	78.9	57.8	0.000		
Parents	15	3	12	0.000		
%	83.3	16.7	66.6	0.001		
Partner	35	18	17	0.000		
%	66	34	32	0,000		
Religious leader	8	1	7	0.000		
%	88.9	11.1	77.8	0.0013		
TOTAL	91	113	91	0.000		
%	44.6	55.4	44.6	0.0013		

Analysis of the frequency of methods used revealed that intrauterine contraceptive devices (IUCDs) were the most preferred method in the Santa health district. This reflects a study by Frankline et al (2005) where the use of long-term contraceptive methods had increased in five countries (Cameroon, Kenya, Mozambique, Rwanda and Senegal) except in Nigeria which experienced a reversal trend in use (Family R, 2005).

At the Santa District Hospital there was a massive preference for long-lasting methods (IUCD and Implants) - 77.9% for all women of childbearing age who were key informants. Those already practicing family planning indicated to a greater extend that they would use modern family planning methods in the months ahead (76.8%) as opposed to the non-users (48.9%). This illustrates that there is an unmet need for family planning in Santa health district despite the relatively high percentage of non-users (48.9%) who indicated that they wouldn't want to use any family planning method in the months ahead. It is worth of note that a study conducted in 2005 by USAID revealed that the unmet family planning needs in Cameroon were up to 20% (Population Reference Bureau, 2007). In both groups (users and non-users) there was no statistically significant difference between what was enumerated as the advantages and disadvantages of family planning.

The "BEHAVE" framework cannot be applied here because the doer / non-doer analysis should identify statistically significant differences between Users and Non-Users if an intervention should be applied; because it is very probable that the determinants found to be different between the two groups are true differences (not just due to chance). The determinants identified had less than a 5% probability of being due to chance (i.e. p < 0.05).

A similar study for social and behavior change for family planning by CORE Group (2012) also revealed no statistically significant difference in the negative and positive consequences in old Sarai district (South East Asia). This study reveals that accessibility (62.2% difference); availability of long-lasting methods (94. 6% difference), counseling (81.8% difference), and the convenience of the method (71.4 difference) were the determinants that could probably facilitate non users of family planning to take up modern contraceptives. The above data are supported from the qualitative and quantitative data from the major health facilities in Santa where 86% of clients preferred long-lasting methods such as IUCDs and Implants.

Male partners (66.6%) and religious leaders (77.8%) were the two categories with significant differences against the uptake of family planning. Therefore Behavior-Change messages need to be addressed to these groups of people on the "BEHAVE" framework. It is important that myths and unfounded concerns raised by these groups of people be addressed. This corroborates with a study carried out by Rossem et al (2011) in Urban Cameroon which revealed that women tend to value the opinions of family members and religious leaders much more than the opinions of their peers.

The findings from this study highlight the social nature of beliefs and behaviors around family planning. The decision to use or not is primarily influenced by others from within the social set up, whose views and perceptions are often more important than those of an individual. Secondly, these behaviors are influenced by access - how difficult or easy it is to get what one gets and what one does with the behavior. Therefore, family planning campaigns should look beyond the individual and get further to social networks in order to ease demand and remove barriers.

# CONCLUSION

There exist unmet needs of family planning in the Santa health district evidenced by the desire of many women of childbearing age to adopt family planning behaviors but are hindered by several socio-cultural barriers. The main barriers to modern contraceptive uptake among women of childbearing age in Santa Health District are:

- Unavailability of long-lasting methods such as the IUCDs and Implants.
- Inaccessibility of available methods.
- Lack of counseling on the convenience of each method.
- Male partner and family disapproval, including religious beliefs.
- Both users and non-users of F.P. methods exhibit inadequate awareness on the positive and negative consequences of taking up family planning.
- Social norms influence contraceptive uptake and constitute barriers to potential users of family planning.

# RECOMMENDATIONS

- All health facilities in Santa health district that would like to use behavior-change communication to improve on their indicators should use the following determinants: availability of long-acting methods; accessibility of health facilities; adequate counseling on family planning methods, etc. for targeted clients and priority groups to seek the way forward.
- The health facility administration should design malefriendly interventions for Family Planning uptake.
- The Santa District Health Service administration should assist the health facilities to come up with interventions using the designed "BEHAVE" framework to improve on their family planning indicators.

# FURTHER STUDIES

- 1. A similar study should be carried out covering the whole North West Region to find out if the above findings and proposed interventions could be extrapolated to the rest of the region.
- 2. An anthropological research to examine the cultural norms that underlie social networks and cultural barriers with regards to family planning in Santa health District is recommended.
- 3. A "KAP" study on men's participation and influence on Family Planning in Santa health district is also recommended.

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