# Unwanted pregnancies and barriers to contraceptive use among women of childbearing age in the city of Bafoussam, Cameroon

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#### Introduction

Unwanted pregnancy remains a major contemporary problem, given the negative consequences they inflict on families in general, in women of childbearing age and children below five years in particular. These unintended pregnancies are among other things, the origin of poverty, family instability and child and maternal morbi-mortality. In fact, the proportion of unintended pregnancies worldwide is estimated at 41%, and 22% of these unwanted pregnancies are terminated through induced abortions [1]. It is also estimated that one-quarter to two-fifth of maternal deaths are due to unwanted pregnancies [1].

In Cameroon, the phenomenon of unwanted pregnancies is acute, especially among adolescents. A study showed that the prevalence of these pregnancies is 24% among adolescent students in the city of Yaounde [2]. To fight against this scourge, Cameroon, with the assistance of its national and international partners has invested more to improving access to family planning services for women of childbearing age. This investment has been materialized by the integration of family planning services in the Minimum Package of Activities (PMA) at all levels of the health pyramid.

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# **ABSTRACT**

**Objective:** To identify barriers to the use of contraceptive methods among women of childbearing age in the city of Bafoussam.

**Methods:** We conducted a descriptive study on women of childbearing age attending the Tyo Medicalised Health Center in Bafoussam. Data were collected by direct interviews, using a structured questionnaire.

**Results:** One hundred and eighty women whose average age was 27.55 years were enrolled in the study. Forty percent of the women reported that their last pregnancy was unwanted and 15.2% of them voluntarily aborted. Barriers to the use of contraceptive identified were: the fear of side effects (15.0%), refusal of spouse (9.4%), the lack of information (8.3%).

**Conclusion:** Awareness and more effective education programs targeting not only women but men also, should be implemented to break those barriers.

**KEY WORDS:** 

Unwanted pregnancies

Barriers Contraceptive methods

The assessment of the implementation of these activities is regularly monitored through National Demographic and Health Surveys. The most recent survey (in 2011) shows that, the proportion of women who knew at least one contraceptive method at the time of the survey was 94% and the prevalence of the contraception use was 24% [4].

This gap between the levels of knowledge on contraceptive methods and actual use of these makes us think about the existence of barriers to the use of contraceptives by women of childbearing age in Cameroon. In order to identify these barriers, this study was implemented at the Tyo Medicalised Health Centre in Bafoussam.

#### Materials and methods

# Study design and site

It was a cross-sectional descriptive study based on the administration of a questionnaire by interviewing women of childbearing age who visited the Tyo Medicalised Health Centre. The Tyo Medicalised Health Centre is one of the most important public health facilities in the city of Bafoussam after the regional hospital and the Mifi District hospital. It was originally dedicated to render mother and child health services, hence the name, Tyo MIP (Mother-Infant Prevention) from 1975 to 2001. This initial vocation is rooted deep in the local population, and this explains why the Tyo Medicalised Health Centre is visited mostly by women and children. For example in 2012, only 5% of patients who visited this health centre were received at the outpatient service for general consultation, while the remaining 95% were received for antenatal care (ANC), maternity and vaccination services (data collected from consultation records).

#### Sampling

For the selection of study participants, a stratified two-stage sampling was performed. The first stage consisted in the selection of days for data collection, based on a systematic sampling method where sampling pitch/step was three days. Thus, after haven randomly selected Tuesday as the first day for data collection, the next days for data collection were deduced in the following order: Friday, Monday, Thursday, Sunday, Wednesday, Saturday, Tuesday and so on. To every randomly selected day for data collection was assigned one of the following health services: ANC service, immunization service and general consultation (Outpatient) service.

The selection of study participants in a service was done systematically. Based on the statistics of previous years, the average number of clients expected per day in each health service was determined, and this constituted the sampling frame of the study. Based on the sample size calculated before and on the duration of the study, the number of participants to be included in the study per day was calculated. Thus, from these two pieces of information, the sampling interval/step was calculated.

#### Inclusion and exclusion criteria

Persons included in the study were women of childbearing

age (between 15 and 49 years old), who were received at the Tyo Medicalised Health Centre. Those excluded from the study were women coming for delivery, because of the pain and discomfort associated with childbirth they were not able to give a valid consent. Furthermore, care-takers of patients and their companions were excluded from the study while women who brought their children for vaccination were included.

#### Data analysis

Data collection took place from May to June 2013. Variables collected were socio-economic characteristics of participants and their spouses, gyneco-obstetrical history, knowledge, practices, perceptions and barriers to the use of contraceptive methods. Data were collected by two trained interviewers under the supervision of the principal investigator. Data were entered and analysed in Epi Info Version 3.5.3 software. Statistical analysis was done by calculating means and proportions.

### Results

# Socio-demographic characteristics of study participants

During data collection, 180 participants were interviewed. They visited the health facility for the following reasons: infant vaccination 67 (37.2%), general consultation 64 (35.6%), antenatal care 45 (25.0%) and maternal vaccination 4 (2.2%). The average age of the women interviewed was  $27.55 \pm 6.88$  years. Among study participants, 122 (67.8%) were married, 54 (30.0%) were single, 2 (1.1%) were divorced and 2 (1.1%) were widows. Among married participants, the proportion of women in a monogamous and polygamous marriage was 72.9% and 27.1% respectively.

Regarding the level of education of the participants, 4 (2.3%) were reported to be uneducated, 27 (15.3%), 43 (23.3), 85 (48.0%) had completed their primary education, first cycle secondary education, and second cycle secondary education respectively and 18 (10.2%) reported to have attended higher education. Among the women surveyed, 44.9% were housewives, 21.9% students, and the remaining 33.2% were identified as traders, civil servants, employees and others.

Regarding religious orientation of participants, 60.2% of participants were Catholic. Protestants (Evangelicals) represented 34.1% and the remaining 5.7% were other religious denominations such as Jehovah's Witnesses, awakened/revival/born-again churches and the Muslim religion.

# **Gyneco-obstetric history of participants**

Forty-six women (25.80%) were pregnant at the time of the survey. The average age of menarche in women surveyed was  $14.35 \pm 1.59$  years and the average age of first sexual intercourse was  $17.67 \pm 2.43$  years. The average number of pregnancy per participants was  $3.27 \pm 2.48$ . Concerning birth, the average number of births among participants was  $2.67 \pm 2.19$ . Concerning abortions, the average number was 0.34. While 75.9% of respondents said they have never had an abortion, 17.8% had aborted once, 3.4% had aborted twice, 1.7% had aborted three times and 1.1% had aborted at least four times. A total of 60 abortions was declared and 25 (41.66%) of them was voluntary.

# Unwanted pregnancy and desire to have children by study participants

Women were asked if their last pregnancy was voluntary or not. For pregnant women at the time of the study, the last pregnancy was considered to be that which was current. Of the 160 women who had a history of pregnancy, 64 (40%) reported that their last pregnancy was involuntary. Considering women who were not pregnant at the time of the survey and who had a history of pregnancy, the 61 pregnancies that were desired were all delivered (the child was put birth), while of the 46 unwanted pregnancies, 7 (15.2%) were terminated through abortions, and these abortions were all voluntary. Among women who were pregnant at the time of the survey, the age of their last child was less than 24 months in 44.1% of the cases.

The study participants were asked the number of children they would have desired. The answers to this question shows that the average number of children desired was  $4.88 \pm 1.59$ . Half of participants desired to have at least five children and one desired to have up to 11.

# Knowledge of Study participants on family planning

When asked whether they had heard of family planning, 159 (88.3%) women responded by the affirmative. Participant's source of information on family planning where health personnel, 103 (57.2%); friends, 60 (33.3%); media, 23 (12.8%) and parents, 11 (6.1%).

With regards to the definition of family planning, 144 (80.1%) participants gave a response corresponding to or closely related to one of the correct definitions. On the contrary, 31 of 180 women (17.2%) interviewed declared that they don't know what family planning is, and 3 (1.7%) women reported that it is a practice which renders someone sterile.

Among the respondents, 61% reported knowing at least one contraceptive method. The male condom is the most known contraceptive method (57.8%), followed by pills, 57 (31.7%); implants, 44 (24.4%); injectable, 43 (23.9%); Intra-Uterine Devices (IUDs), 34 (18.9%); the female condom, 33 (18.3%); the rhythm method, 32 (17.8%); coitus interruptus, 17 (9.4%); tubal ligation, 9 (5.0%) and the lactational amenorrhea method (LAM), 8 (4.4%).

# Knowledge of adverse effects and contra-indications of contraceptive methods

Participants were first of all asked to give the side effects of various contraceptive methods, then later asked to give their contra-indications. Concerning the side effects listed by study participants, those that were false or unlikely to be correct were identified. They were excessive weight gain (28.9%), increased menstrual flow (20.0%), infertility (15.6%), difficulties to conceive (5.0%) and cancers (4.4%). The possible side effects mentioned by the women are: risk of non-pregnancy related amenorrhea (3.9%) and moderate weight gain (3.9%).

In terms of contra-indications, 89 (49.4%) women out of 180 reported to know nothing. The contra-indications cited by the women are; nulliparity (7.8%), excess weight (6.1%), breastfeeding (5.0%), hypertension (2.2%) and diabetes (2.2%).

### Practice of family planning by study participating

Sexually active participants were asked if they had once use a contraceptive method. To this question, 94 (54.7%) responded in the affirmative. The male condom was still the most commonly used contraceptive method, 104 (43.3%); followed by intra-uterine devices (IUD), 34 (18.9%); the calendar method or periodic abstinence, 17 (9.4%); coitus interruptus, 9 (5.0%); injectable, 7 (3.9%); female condom, 6 (3.3%); pills, 5 (2.8%); implants, 3 (1.7%); and Lactational Amenorrhea Method (LAM), 1 (0.6%).

#### Barriers of contraceptive use

To identify factors that hinder the utilization of contraceptive methods women were asked if they encounter barriers to access any contraceptive method. Of the 173 women who responded to this question, 51 (29.5%) reported haven faced some difficulties. The various barriers identified by these women were: fear of side effects, 27 (15.0%); refusal of spouse/partner, 17 (9.4%); lack of information, 15 (8.3%) and the high cost of some contraceptive methods, 7 (3.9%). No woman complained of the remoteness of the health facility as a barrier to access contraceptive methods.

# **Discussion**

It appears from this study that, contrary to the Cameroon Demographic and Health Surveys (DHS) [4, 5], the level of knowledge of contraceptive methods is relatively low. Indeed, if the 2011 DHS shows that 94.3% of women aged between 15 and 49 years know at least one contraceptive method, our study shows that this proportion is 61%. This difference is partially explained by the difference in the methods used to collect data relative to knowledge of contraceptive methods. In the national DHS, the investigator after a brief description of each contraceptive method asked every respondent if she had once heard of the method, while in this study, the interviewer simply asked women to mention the contraceptive methods they knew. Certainly, this approach of assessing knowledge of contraceptive methods could suffer from some memory bias. But we should mind the fact that, having heard of condoms for example, does not necessarily mean that the respondent knows its involvement or use in contraception. The 2011 national DHS showed that participant's knowledge of at least one contraceptive method was mostly their knowledge of the male

condom. But a slight paradox of this result was observed in the sense where; while the proportion of women who knew at least one contraceptive method was 94.4%, the proportion of those who knew the male condom as a contraceptive method was 90.5% giving a discrepancy margin of 3.9% for all others contraceptives [4]. Now, considering the mediatisation of male condoms in the fight against HIV/AIDS, the high proportion of women who might have heard of male condoms was predictable, but they would have most probably heard of it in the context of the fight against HIV/AIDS [6] and not for unwanted pregnancies prevention. Considering these facts, we might have found some explanation, at least in part, for the large gap (70.4%) between knowledge and the practice of contraceptive methods observed in the DHS of 2011[4]. In a nut shell, to assess women's knowledge on contraceptive methods, it would be more objective to ask the latter to spontaneously name "methods that a woman can use to prevent pregnancy after sex" rather than asking if they have ever heard of any contraceptive method.

Although the level of knowledge on contraceptive methods is relatively low in our study sample, a considerable proportion of women claimed to have heard of family planning (88.3%) and more than 8 out of 10 women gave the correct definition of what family planning is. The main source of information on family planning was reported to be the health personnel (57.2%) and parents (6.1%) came in the fourth position. Health personnel being reported as the main source of information on family planning can be explained by the sample method selection used in this study (health facility base selection). Therefore, it is very likely that participants had previously had some contact with health personnel during which they were exposed to a family planning message. The proportion of those who would have reported their main source of information on family planning to be the media would be much higher if household base sampling were used [4]. Parents as a source of information on family planning remains the least frequent. The same finding was observed by Kamtchouing P. et al in their study on adolescent sexuality in schools [2]. This is partly explained by the fact that in many African's families, sexuality oriented discussions remains a taboo subject [7], such that for women to learn and edify themselves about the topic they rely on either the media or friends.

The practice of family planning is low among the women

surveyed. In fact, only 54.7% of sexually active women interviewed reported to have at least once used a contraceptive method. The most commonly used method being of course the male condom, followed by the IUD. Periodic abstinence and coitus interruptus are the most used traditional methods.

Besides depicting the low level of knowledge on contraceptive methods, this study looked at other factors that could explain the low practise of contraception and use of contraceptive methods by women of childbearing age. About 3 in 10 women reported having difficulties using any sort of contraceptive method. The most recurrent problem was the fear of side effects. A study carried out in Ghana in 2013 equally identified the fear of side effects as the main reason for the non-use of modern contraceptive methods among women of childbearing age [8]. Like that carried out in Ghana, this study shows that most of the side effects that women are afraid of are misconceptions that discount contraceptive methods. As a matter of fact, when asked to name the side effects of contraceptive methods, women cited among others; excessive weight gains, infertility and difficulties to fulfil future desires to conceive. Some women also reported spouse refusal to be a barrier to the use of contraceptive methods. These results are in line with the fact that 53% of women in a marital context in Cameroon have never discussed family planning with their partner [4]. The involvement of the spouse is proven to be necessary for the successful implementation of family planning [9], especially when the age difference between sexual partners is great [10]. Nketiah-Amponsah through a study in 2012 came to the conclusion that women who take decisions about their health in collaboration with their partners are more likely to use modern contraceptive methods compared to women who discreetly take these decisions alone [11]. Moreover, a significant proportion of women admitted they don't use contraception because of lack of information. This is in line with the low level of knowledge on contraceptive methods commented above.

It was noticed that the women surveyed in this study gave contra-indications to the use of contraceptive methods such as overweight and the nulliparous status. These erroneous contra-indications could also act as a barrier to the use of contraceptive methods.

The immediate consequence of not using contraceptive

methods is the incidence of unwanted pregnancies. It has been reported that 41% of registered pregnancies worldwide were undesired and 22% of these pregnancies were terminated through voluntary abortions [1]. In our study, 2 in 5 women reported that their last pregnancy was not desired. Besides, all 61 pregnancies that were reported as desired were delivered while 7 of the 46 (15.2%) unwanted pregnancies that were reported ended up through voluntary abortions. Voluntary abortions from unwanted pregnancies, especially in countries where the act is punishable by law like the case of Cameroon are the source of a significant number of maternal deaths. In fact, it has been estimated that between 1/4 and 2/5 of maternal deaths can be avoided if unplanned and unwanted pregnancies were eliminated [1]. In addition to its positive effect on the health of the mother [12], the use of contraceptive methods also has a positive impact on the health of the child [13] (because it allows for spacing and consequently better care taking of the eldest child) and generally on the overall wellbeing of a population [14].

This study is not void of some weaknesses. It is limited only to women attending the Tyo Medicalised Health Centre. Thus, geographical accessibility as a barrier to the use of contraceptive methods was not assessed. Furthermore, the collection of information on participant's knowledge on adverse effects and contra- indications of contraceptive methods was done generally, not per contraceptive methods. Given the results of this study, it is easy to see that the low

level of knowledge and false ideas of contra-indications on contraceptive methods, associated with the fear of side effects and the negative attitudes of spouses vis-à-vis contraceptive methods could explain at least in part the low use of contraceptives, which thus exposes women to unwanted pregnancies and contributes to the deterioration of maternal and child health. The family planning programs should thus accentuate on increasing awareness and on educating women and their spouses on contraceptive use.

#### **Conflict of Interest**

We declare that we have no conflict of interest.

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#### References

- 1 Campbell M, GrahamWJ. Strategies for reducing maternal mortality: getting on with what works. Lancet 2006; 368: 1284-1299.
- 2 Kamtchouing P, Takougang I, Ngoh N, Yakam I. La sexualité des adolescents en milieu scolaire à Yaoundé (Cameroun). Contraception, fertilité, sexualité. 1997 25;10:798-801.
- 3 Institut National de la Statistique (INS) et ICF. International 2012. Enquête Démographique et de Santé et à Indicateurs Multiples du Cameroun 2011. Calverton, Maryland, USA: INS et ICF International. Available: http://slmp-550-104.slc.westdc.net/~stat54/downloads/EDS-MICS/EDSMICS2011.pdf Accessed 20 February 2014
- 4 Organisation Mondiale de la Santé, École de Santé Publique Johns Hopkins Bloomberg (2011). Planification familiale, Manuel à l'intention des prestataires de Services du monde entier. http://apps.who.int/iris/bitstream/10665/97943/1/9780978856304\_fre.pdf
- 5 Gastineau B, Binet C. Sexualité prémaritale à Antananarivo (Madagascar) Comment les étudiant (e) s s'affranchissent-ils des normes? Afr J Reprod Health. 2013; 17;2: 169-185.
- 6 Amoussou, C. Education sexuelle en famille: tabou ou nécessité. In : La santé de la reproduction: promotion humaine ou nouvel impérialisme économique: symposium de l'IAJP tenu au CODLAM (Cotonou) les 4 et 5 décembre 1999. Flamboyant 2001:103.

- 7 Teye JK. Modern Contraceptive Use among Women in the Asuogyaman District of Ghana: Is Reliability more Important than Health Concerns? Afr J Reprod Health. 2013;17;2:58-71.
- 8 UNFPA Cameroun. Santé maternelle: engager les hommes. Rapport 2012 : Available: http://www.cameroon.unfpa.org Accessed 25 September 2013.
- 9 Amo-Adjei J. Age differences and protected first heterosexual intercourse in Ghana. Afr J Reprod Health. 2012; 16;4: 58-67.
- 10 Nketiah-Amponsah E, Arthur E, Abuosi A. Correlates of Contraceptive use among Ghanaian women of Reproductive Age (15-49 Years). Afr J Reprod Health 2012;16;3: 154-69.
- 11 The Alan Guttmacher Institute. Sharing responsibility: women, society and abortion worldwide. NewYork: The Alan Guttmacher Institute, 1999: Available: http://www.guttmacher.org/pubs/sharing.pdf. Accessed 5 September 2013.
- 12 Gonçalves SD, Moultrie TA. Short preceding birth intervals and child mortality in Mozambique. Afr J Reprod Health. 2012; 16;4: 29-42.
- 13 Longwe A, Smits J. The Impact of Family Planning on Primary School Enrolment in Sub-national Areas within 25 African Countries. Afr J Reprod Health. 2013;17;2: 23-28.