Provision of family planning services by community health workers in urban slums of Cameroon

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Abstract

Over 50% of pregnancies in slums are unintended, signifying unmet family planning (FP) needs. In Cameroon, about 60% of city dwellers live in slums where basic health services including FP is lacking. With an acute shortage of health personnel in Africa, community health workers (CHWs) can play a vital role in administering basic FP services. The Cameroon Baptist Convention Health Services implemented a pilot project to reduce the unmet FP needs in urban slums through utilization of CHWs. We found that with adequate training and support, CHWs can successfully provide basic FP services in urban slums. (Afr J Reprod Health 2023; 27 [8]: 14-18).

Keywords: Developing countries, family planning services, community health workers, unplanned pregnancies, contraceptive agents, delivery of health care

Résumé

Plus de 50 % des grossesses dans les bidonvilles ne sont pas désirées, ce qui signifie des besoins de planification familiale (PF) non satisfaits. Au Cameroun, environ 60% des citadins vivent dans des bidonvilles où les services de santé de base dont la PF font défaut. Avec une grave pénurie de personnel de santé en Afrique, les agents de santé communautaires (ASC) peuvent jouer un rôle vital dans l'administration des services de base de PF. Les services de santé de la Convention baptiste du Cameroun ont mis en œuvre un projet pilote pour réduire les besoins non satisfaits en PF dans les bidonvilles urbains grâce à l'utilisation des ASC. Nous avons constaté qu'avec une formation et un soutien adéquats, les ASC peuvent fournir avec succès des services de base de PF dans les bidonvilles urbains. (Afr J Reprod Health 2023; 27 [8]: 14-18).

Mots-clés: Pays en développement, services de planification familiale, agents de santé communautaires, grossesses non planifiées, agents contraceptifs ; prestations des soins de santé

Introduction

Almost one billion people in the global south live in urban slums or informal settlements and over 50% of urban dwellers in sub-Saharan Africa (SSA) live in these unsafe, unsanitary, and overcrowded communities1. In Cameroon, about 53% of the estimated population of over 25 million resides in cities and towns and over 60% of these individuals live in slums or informal settlements; this means that over seven million Cameroonians live in settings that may lack running water, electricity, and even basic healthcare2.

To the latter point, there is evidence that young girls in urban slums are two times more likely to become pregnant compared to their counterparts residing in non-slum settlements3. Over 50% of pregnancies in slums are unintended, this likely indicates significant unmet family planning (FP) needs which is a global public health high-priority target; unintended pregnancies, particularly among adolescent girls, in urban slums are typically attributed to a lack of reproductive health education and inaccessibility of affordable FP services. Although exact FP figures for Cameroon are unavailable, we know that in Bangladesh, 15% of women in urban slums have never used any form of modern contraceptive4, and in a study of Cameroonian women that were engaged in care found that less than one-third of...
study participants had ever used any form of modern contraceptives. 

In settings where quality maternal and child health (MCH) and safe abortion services are not accessible, the morbidity and mortality associated with unintended pregnancy for both mother and child can be disastrous. Therefore, improving access to modern FP methods is an essential strategy to protect the welfare of women and children.

Although Cameroon has a very restrictive abortion policy, which only permits abortion in pregnancies that originate from rape, incest, or if the pregnancy endangers the woman’s life, there is evidence that induced abortions are common in Cameroon with a prevalence of 20 to 35% among women of reproductive age. Due to this restrictive policy, abortion services are often provided in hiding, usually by unskilled personnel, which can lead to unsafe procedures with detrimental consequences. For example, unsafe abortion account for one-quarter of maternal mortality in Cameroon. The abortions are usually performed at home or in clinics and are mostly provided by friends, general practitioners, and nurses or they are self-induced. The most common procedures are manual vacuum aspiration, dilatation and curettage, or use of misoprostol. The importance of access to quality FP services to prevent such illegal and unsafe abortions cannot be overemphasized.

With an acute shortage of health personnel in low and middle-income countries (LMICs), community health workers (CHWs) can play a vital role in administering basic health services including basic FP. CHWs are lay health care providers who have been informally trained for a short time. They are usually members of the communities they serve and are often supervised by one or more hospitals or integrated health centers.

In LMICs, CHWs are becoming useful to provide basic FP services. CHWs have been dispensing condoms and birth control pills (BCP) for several decades in LMICs. The trust and close relationships between the CHWs and members in community may also result in higher FP uptake compared to that achieved by hospital-based services alone. The CHWs feel motivated and recognized when additional responsibility is given to them especially when it is associated with extra financial benefits. However, in Cameroon, CHWs have never been involved in the provision of FP services. The CHWs activities in Cameroon have been limited to sensitization for HIV testing and childhood vaccination, and distribution of mosquito nets and antihelmintics.

In Cameroon, data are not available on the unmet FP needs in urban slums; however, no comprehensive FP intervention program has been executed in urban slums to our knowledge. Moreover, there is a rapid rise in the population of the already overcrowded slums in the capital city, Yaoundé, and the economic capital, Douala, due to a six-year-old ongoing socio-political crisis in the Northwest and Southwest regions that has forced over 500,000 persons to flee their homes. The influx of these internally displaced persons (IDPs) within the cities of Yaoundé and Douala has created an even more urgent need for FP services within its slums where many IDPs now live. These circumstances are concerning for a rising proportion of unplanned pregnancies and unsafe abortions occurring within these slums.

Service provision

To address this situation, the Cameroon Baptist Convention Health Services (CBCHS), a large faith-based healthcare organization in Cameroon with a network of 95 health facilities in nine of the 10 regions in Cameroon developed a pilot project to reduce the FP unmet needs in these slums through utilization of CHWs. This project was funded through the FP 2020 rapid response mechanism grant. The capacity of 30 CHWs (15 in Yaoundé and 15 in Douala) was enhanced by integrating basic FP services in their routine community activities within the urban slums. These CHWs were of both sexes and were predominately young and middle-aged persons.

With assistance from the Regional Delegates of public health for the Centre and littoral regions of Cameroon and the district medical officers for New Bell and Bonassama Health Districts in Douala and the Biyem-Assi and Cité Verte Health Districts in Yaoundé, we selected 15 CHWs per city resulting in a total of 30 CHWs for the project that lasted for a period of four months beginning November 2019 and ending February 2020. The CHWs received one week of basic FP training for CHWs from each region. The training was
comprised of lectures on basic male and female reproductive anatomy, importance of FP, healthy timing and spacing of pregnancy, different contraceptive methods, FP counseling, rights of the client in FP, and infection prevention measures. Demonstration and counter demonstrations were conducted for male and female condom use and Sayana Press (an injectable contraceptive which is administered subcutaneously). A series of counseling and health education role plays were held. At the end of the training, each participant was given a working kit which was comprised of a bag with a flip chart for counseling and education, penile and vaginal models for condom demonstration, FP commodities including male and female condoms, BCPs, and Sayana Press. A curriculum for the provision of FP services by CHWs was developed by the CBCHS FP staff. This curriculum was also part of their working kits and they were encouraged to refer to it from time to time as a reference guide.

A referral card was developed to refer women needing long-acting reversible contraceptives (LARCs) such as implants and intrauterine devices (IUDs). The referrals in Douala were sent either to the Baptist Hospital in Mboppi or the Baptist Hospital in Bonaberi depending on the client’s preference. In Yaoundé, all referrals were sent to the Baptist Hospital at EtougEbe. On the referral cards, CHWs wrote their name, name of the client they were referring, the method the client has chosen, and the date of referral. When the women arrived at the clinic with the referral cards, they were provided the LARC method of their choice at no cost as part of the project. The methods that were available for the women to choose from included: male condom, female condom, combined oral contraceptive pills, Progesterone only contraceptive pills, and Sayanna press in the community, and in the hospital, Copper bearing intrauterine device, Jadelle implant, and Implanon implant.

Periodic face-to-face field supervision was performed by two senior CBCHS FP providers to encourage the CHWs and to respond to their concerns. The CHWs returned to the clinics at the end of every month to submit their statistics, refill their supplies, and receive a stipend of 10,000 FRS CFA ($20) to enable them to move around their communities. In our program 30 CHWs were able to reach over 5,000 clients in slums settlements within the four months. This indicates that each CHW attended to approximately 42 clients per month. Figure 1 shows the gap between clients referred to the hospital and those that actually arrived the hospital.

**Figure 1: Referrals**

### Discussion

We found that with adequate training and support, CHWs in Cameroon can provide basic FP services in urban slums. CHWs have been used to provide FP services in other LMICs, but our project is unique because it was conducted in urban slums. In a systematic literature review of 86 studies evaluating the CHWs and FP provision, 93% confirmed that CHWs can effectively upscale the use of modern methods of contraception. The authors concluded that there is strong evidence that CHWs can improve FP services access. Therefore, if many more CHWs from all the urban slums were empowered with basic FP skills, FP coverage in the country might significantly improve and the contraceptives prevalence rate (CPR) might rise.

Our findings improve on the reach outcomes attained in a comparable study conducted in Tanzania; where in three months, 25 CHWs reached 710 clients with FP methods. The difference could be due to the fact that the Tanzania project was multifaceted because the CHWs were implementing three packages in one (FP, HIV, and STIs) whereas, our project was solely focused on FP even though the CHWs were doing the FP alongside their routine activities. In Ethiopia, CHWs were trained to administer intramuscular
injection and in three years, 600
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administered 15,410 injectable
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contraceptives17. At the end of the project, a 25%
increase in contraceptive use among the women
surveyed was observed from 30.1% (baseline pre-
intervention) to 37.7% (post-intervention). In a
similar project in India executed by CHWs, the FP
unmet need decreased from 22.4% to 14.7% in one
year18. Results of a cross-sectional study in Niger
shows that women visited by CHWs in the past
three months were more likely to be using FP
methods than women who were not (AOR = 1.94[95% CI 1.07–3.51])19.

There are different perceptions about
provision of FP services by CHWs from the client
perspective. In our project, the CHWs appeared to
be well received by the community as reflected by
the number of clients reached within a few months.
In a Rwandan project in which CHWs provided
standard day methods with cycle beats, 99% of the
women who were attended to affirmed that CHWs
are competent in providing the method and they
had confidence in them20. Whereas, in a cross-
sectional survey in Western Kenya, two-thirds of
respondents were not comfortable receiving FP
services from CHWs and felt that they were not
competent in offering such services21. However,
this survey was not conducted in slums or informal
settlements where there is an acute lack of basic
health services. Where there is access to basic
health services, women may not be comfortable
getting FP services from CHWs.

CHWs can only provide short acting
methods like BCPs, condoms, and injectable
contraceptives, which is one major limitation.
Even though these methods are very effective with
perfect use, they are user dependent. With typical
use, short acting methods are associated with lower
efficacy rates due to non-adherence or renewal/refill delays22 as well as high rates of
discontinuation when minor side effects occur23. In
our project, we trained and permitted the CHWs to
administer Sayana press, which is a subcutaneous
injection effective for three months. It is safe and
requires fewer manipulations because it comes as a
prefilled single use injection. Women are also
trained to self-administer it. In the Ethiopian
project, CHWs successfully administered
intramuscular injectable contraceptive despite the
numerous manipulations required17. In a systematic
literature review of 19 studies evaluating
administration of intramuscular injectable
contraceptives by CHWs, the authors concluded
that with appropriate training and supervision,
CHWs can safely provide intra muscular injectable
contraceptives24. Long-acting reversible
contraceptives (LARCs), including IUDs and
implants, have higher continuation rates, higher
effectiveness, and higher tolerability compared to
BCPs and injectables22. Unfortunately, due to
inadequate or informal medical training, these
cannot be provided by CHWs. In 2014, the CPR for
Cameroon was 34.4%. If CHWs are fully involved
in FP service provision, we hypothesize that the
CPR could double. However, countries that have
implemented provision of FP services by CHWs do
not have higher CPRs than those that have not. This
conclusion is difficult to make because there are no
data on the pre and post CPRs based on
implementation of FP methods by CHWs.

We identified several areas for
improvement during the pilot implementation
period. As noted in Figure 1, less than half of those
referred for LARCs arrived at the referral clinics.
This indicates gaps in the referral system that was
put in place. The women were sent with a referral
card; perhaps if the CHWs had to accompany them
to the clinic (active rather than passive referral); the
results may have been better. Subsequent projects
should consider the implementation of an active
referral system. Another major challenge was
difficulty conducting supervision visits by trained
medical personnel due to inaccessible roads within
the slums. The supervisors often had to trek several
miles on foot or use a motor bike for transport.

Conclusion
CHWs are capable of providing basic FP services
including counseling, BCP, male and female
condoms, and Sayana press in urban slums in
Cameroon. FP programs should empower and train
CHWs and deploy them in urban slums and other
informal settlements that lack access to FP. An
active referral system should be put in place for
women needing LARCs.

Ethics approval and consent to participate
We obtained IRB approval from the Cameroon
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Authors' contributions

KN and FM wrote the grant application. SM, KN and FM implemented the project. SM drafted the first manuscript. HB, AT, KN and FM reviewed and edited the manuscript.

References