Community-Based Distribution of Family Planning Services in Humanitarian Settings: Identified Need and Potential from Malakal, South Sudan

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ABSTRACT

Displacement can increase people's desire and need for family planning while they simultaneously experience barriers to access. While community-based approaches to the distribution of family planning methods have been well-established and documented in other development contexts since the 1970s, limited documentation exists for community-based distribution (CBD) of contraceptives in humanitarian settings. The Women's Refugee Commission and American Refugee Committee (ARC) implemented a pilot project on CBD of family planning services in Malakal, South Sudan, to examine whether CBD is applicable and feasible in a humanitarian setting and would enhance people's access to and use of contraceptives. Through close consultation with the United States Centers for Disease Control and Prevention, the project was implemented from May 2010-August 2011 in three administrative units in Malakal with a total population of 79,700. In August 2011, a process evaluation was conducted, consisting of a household survey, focus group discussions, in-depth interviews, and a review of routinely collected data. Qualitative data showed community openness to CBD. Current demand for family planning services appeared to be driven by changing circumstances, including lifestyle changes. Respondents did not naturally link conflict to challenges in obtaining family planning services. Analysis of routinely collected

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data reflected an increase in uptake at the community level. From the collected data, continued need and existing evidence from development contexts, CBD of family planning services appears feasible and promising, even in a volatile setting.

Introduction

Under international human rights law, access to family planning is a human right[1] and neglecting family planning can have serious health consequences.[2] Studies on funding trends[3] and global policies[4] from the Reproductive Health Access, Information and Services in Emergencies (RAISE) Initiative have shown that family planning in crisis-affected settings has been largely overlooked. At the field level, the paucity of global policies and funding for family planning has been reflected in the lack of services in several internally displaced person (IDP) camp settings.[5] Documented by McGinn et al., cross-sectional baseline studies in three conflict-affected settings in 2007-2008 found between 12 per cent and 35 per cent of women having unmet need for contraception.[6] The adequate provision of family planning services in humanitarian settings is often hindered by the collapse of health systems, lack of trained staff, and logistical barriers, such as conflict-related insecurity and damaged or non-existent infrastructure.[7]

In development settings, community-based approaches to the distribution of family planning services have been well-established and documented since the 1970s. According to Phillips et al., where contraceptive prevalence is low, CBD can have an impact on knowledge and preferences.[8] Prata et al., further note that CBD is recommended in rural communities and isolated urban contexts because it offers accessibility, convenience, and affordability to clients.[9] Despite the wealth of knowledge and research in development settings, limited documentation exists for CBD in humanitarian settings.[10] The purpose of this paper is to describe the findings from a process evaluation of a pilot project on CBD of family planning services in a crisis-affected setting in South Sudan to offer insights for future programming and provide evidence on the promises of this approach in this context.

Background

South Sudan saw the displacement of roughly 4.5 million people and the death of approximately two million through its twenty-two year con-

flict with North Sudan.[11] Located on the eastern bank of the White Nile, Malakal town is the capital of Upper Nile State. The predominant residents are Shiluk, with other ethnic groups such as Nuer and Dinka comprising substantial numbers.[12] The town has been historically prone to conflict: while Northern forces left with the signing of the Comprehensive Peace Agreement in 2005, intertribal conflict and the Sudan People's Liberation Army splinter groups continued to threaten the peace.[13] Roughly 20,000 IDPs and refugees were repatriated to Upper Nile State between 2006 and June 2009.[14] Following South Sudan's declaration of independence on 9 July 2011, after a referendum in January 2011, Malakal and Upper Nile State saw an influx of an additional 40,000 returnees.[15]

The American Refugee Committee (ARC) is an international non-profit organization that provides life-saving and local capacity-building services to refugees and IDPs in emergency and post-conflict settings around the world. ARC has been working in Malakal since 2006, strengthening reproductive health (RH) services in Malakal Teaching Hospital (MTH)—the public referral hospital for Upper Nile State—and Bam Primary Health Care Centre (PHCC). In 2009, ARC trained health staff in the provision of modern contraceptives (condoms, oral contraceptive pills (OCPs), emergency contraception (EC), injectable contraceptives, implants, intrauterine devices, tubal ligation, and vasectomy) and established family planning units in the two facilities. In 2007, contraceptive prevalence among all women in Malakal for any method stood at 3.2 per cent, and for modern methods at 1.9 per cent.[16] Data from the two facilities show the most commonly chosen contraceptive method was the OCP.[17]

Recognizing the gap in documented evidence for CBD of family planning services in humanitarian settings, the Women's Refugee Commission (WRC), a non-profit research and advocacy organization, approached ARC to pilot a CBD approach in Malakal to examine its applicability and feasibility, as well as whether it could enhance people's access to and use of contraceptives. Malakal seemed an appropriate site for the implementation and monitoring of a pilot CBD project, given the existence of necessary family planning infrastructure, the crisis-affected nature of the town, availability of baseline data, and possibilities for referrals to MTH and Bam PHCC. Little published data on family planning was available for Malakal at pilot initiation; related literature on knowledge, attitudes, behaviours, and service statistics were limited to Darfur and other locations in North Sudan.[18] The pilot project received approval from the Malakal State Ministry of Health (MOH).

The CBD approach chosen was Typology II in Phillips et al.'s classification of CBD programmes,[19] given low awareness and demand, and limited reach of the facility-based services. In Type II CBD, programmes employ CBD workers who are trained to become efficient, effective, and active doorstep outreach workers, bringing services to women in their own homes.[20]

ARC implemented the pilot from May 2010-August 2011 in three of six *payams* (administrative units), targeting a catchment population of 79,700 (see Table 1).

Table 1: Malakal County Population Figures[21]

Payam (administrative unit)	**Population** (2009)
Central Payam*	11,633
Eastern Payam*	24,037
Lelo Payam	5,743
Northern Payam	34,900
Ogot Payam	6,212
Southern Payam*	43,958
Total	**126,483**

**Pilot project implementation sites*

Central, Eastern and Southern *payams* were selected on the basis that no RH-related community-based activities were being offered, and the distance to the two standing facilities was relatively far. At the pilot start-up in May 2010, ARC was the sole provider of contraceptives in the three *payams*, distributing them through MTH and Bam PHCC. ARC began to distribute contraceptives through CBD in August 2010. Each *payam* was staffed with two CBD agents, who conducted household visits, provided short-term contraceptive methods—male and female condoms, combined OCPs, and EC—and referred clients for injectable contraceptives, implants, intrauterine devices (IUDs), and permanent contraceptive methods. CBD agents were selected based on their literacy level, knowledge of RH, and previous health-related experience. They participated in seven trainings and follow-up trainings on family planning, data collection, and male involvement, and were provided a monthly stipend along with non-monetary incentives, such as rain boots and bicycles. CBD agents obtained supplies from the ARC office in Central *payam*, and their work was supervised by ARC staff. ARC constructed outreach sites

(*tukuls*) mid-project to serve as fixed delivery points for the CBD agents and to reduce the travel time for them to replenish supplies. In concordance with the Government of South Sudan's family planning policy,[22] all user fees were waived.

To increase demand for contraceptives, ARC also trained 18 members of a community-based organization (CBO) to become RH promoters and peer educators at pilot start-up. Criteria for selection were primarily based on literacy levels and interest. CBO staff conducted 1,892 household visits; held 61 meetings and 269 health education sessions; organised weekly shows on Radio Malakal; and referred clients to CBD agents and health facilities.

Evaluation Methodology

In August-September 2011, a process evaluation was conducted using quantitative and qualitative methods that included a household survey among women of reproductive age; focus group discussions with community men, women, and students, as well as in-depth interviews with CBD agents; and a review of routinely collected data. The US Centers for Disease Control and Prevention (CDC) provided technical advice on the methodology. CDC determined that this evaluation was public health practice; therefore, it was exempt from CDC institutional review board approval. This article focuses on the qualitative and routine data to assess implementation of the project and attitudes towards CBD of family planning services.

Focus Group Discussions

ARC and the WRC conducted focus group discussions in August 2011 to obtain perspectives on the CBD effort. A WRC staff person served to coordinate the focus group discussions. Two women and two men who spoke English, Arabic, and a local language (Dinka, Nuer, or Shiluk) were recruited from the community to be facilitators and note-takers. They participated in a 1.5-day training that reviewed roles, ethical processes, and the topic guide developed by the ARC, CDC, and the WRC. The facilitators piloted the tools among groups of women and men to ensure understanding of the questions. The team conducted twelve focus group discussions—three each with each segment— totalling thirty-five women aged 16-50, sixteen men aged 21-58, sixty-three female students aged 15-21, and twenty-nine male students aged 14-23. Adults were residents of their respective *payams*. Students were often older than usual for

their school year, as many had missed schooling during the conflict. The same guide was used for adult and student groups. Each focus group discussion lasted roughly one hour. They were held in private, quiet spaces in the community, near the clinic, or in classrooms.

Informed verbal consent was obtained from all participants, and the focus group discussions were recorded with an audio recorder. No identifying markers, including names of participants, were recorded or noted in transcription. Debriefing sessions were conducted daily, during which the facilitator and note-taker translated the discussion notes for onsite transcription by the coordinator. The recordings were played for segments where the facilitator, note-taker, or coordinator sought clarification. The audio files were deleted from the recorders after finishing the field work and transcription.

Participants for the focus group discussions were selected through convenience sampling, with the help of school teachers and CBD agents. Since no schools were located in the Eastern *payam* and the selected school in South *payam* had closed for the holidays, school teachers recruited students from three schools in Central *payam*. The teachers selected students from the last year of basic (elementary) school and all three years of secondary school based on their willingness to participate. CBD agents identified women and men from the community that lived in their respective catchment areas who they thought would be willing to participate in the focus group discussions. Two groups of participants in Central *payam* were selected from a health clinic waiting area; all other participants were selected directly from the community. Participants who were direct beneficiaries of CBD, as well as those who had not encountered a CBD agent, were selected. No payments were provided for participation.

CBD Agent Interviews

The interviews for CBD agents followed a standard format and topic guide with similar questions to those in the focus group discussion guide and a comparable consent process. Half of the CBD agents were interviewed for this evaluation. Each interview lasted roughly thirty minutes, and was conducted under trees that allowed the interviewees to be undisturbed. The focus group discussion coordinator conducted the interviews in English and took handwritten notes. The interviews were not audio recorded. No interviews or focus group discussions were implemented among the peer educators and RH promoters, given their lack of accessibility at the time of the evaluation.

The focus group discussion data and in-depth interview notes were analysed separately, by grouping findings under common themes and performing keyword searches to determine trends and to identify aberrant cases. Daily debriefings and discussions among the facilitators, note-takers, and coordinator fed into the data interpretation, especially as the facilitators and note-takers were highly knowledgeable about the local context. The focus group discussion coordinator analysed the findings and reviewed the group discussion and interview data to ensure they complemented each other.

Routine data was collected by ARC throughout the pilot to ensure effective monitoring at all levels. At the field level, RH staff kept a record of activities and weekly/monthly clinic data. Excel 2007 was used to calculate the average percentage change in the number of contraceptives distributed from month to month. The average monthly increase was calculated by summing the monthly increases and dividing by the total number of months. Links were made with the facilities to track whether an incoming client had been referred for a long-term contraceptive method by a CBD agent. Repeat users were tracked through CBD agent household visits, and weekly supervisory visits were initiated to track discontinuing users (i.e. women who stopped using RH services). CBD agents kept a small logbook of the outcomes of each household visit, which were hand-copied by ARC staff into a consolidated logbook. A second ARC staff member reviewed the information to avoid copying errors. A mid-project assessment took place in November 2011 to ensure systems were smoothly functioning and to garner feedback from the CBD agents, peer educators, and RH promoters that included their concerns about their limited salary and lack of appropriate rain gear.

Findings

The pilot project period lasted for eleven months, from August 2010 to July 2011. During that time, CBD agents conducted 2,602 household visits and distributed 8,032 condoms, 4,607 cycles of OCPs, and twenty-nine EC pills.

Focus group discussions

Overall, the focus group discussions showed that the CBD of the family planning project had less reach within the community than was intend-

ed, especially as only a handful of community members reported having encountered a CBD agent. Moreover, none of the students recalled a visit from peer educators.

Despite this, communities expressed openness to CBD and even suggested training male CBD agents and increasing peer outreach through hands-on demonstrations. Those who reported that the standing health facilities were beyond walking distance noted that CBD agents were the community's only source of health information in their remote communities. Often, their *bomas* (smaller administrative units) lacked even a dispensary. Community outreach was widely seen as necessary in informing communities about the benefits and availability of family planning methods. A female adult participant commented, "If CBD agents reach the community, they [community members] would not need to come all the way to MTH. It is easier to access contraceptives that way." A female adult participant who had encountered a CBD agent further noted, "CBD agents should continue working and assisting the community. CBD work was perfect." The value of CBD appears to have been recognised and there was general openness to this community-based approach.

Current demand for family planning services appeared to be driven by changing circumstances. Among focus group discussion participants who were aware of the concept of family planning or methods, women mentioned their changing circumstances as contributing to need. One woman said: "Long ago, the husband is not near. Now we are using a double bed. This has caused problems to women. Once you are next to him, he will not refuse, even if there is a baby sleeping with them. If the pills are available, women can prevent pregnancy." The implications of the lack of family planning options were also understood by male participants, particularly as the discussions unfolded. One man commented, "I know how to prevent myself because it is difficult to feed the children." Boys on the whole demonstrated their ability to think in the longer term. Some acknowledged the challenges of raising a family without adequate financial resources. One older male student remarked: "Family planning is something that is related to the economy. You cannot plan to marry if you are still hungry." Another noted: "You may have a girlfriend, and you are both in school. You should have a plan to use contraceptives, so that you can both study. If the girl becomes pregnant, the boy may need to pay the dowry and may not be able to go to school."

Overall, young people were the group keenest to learn about contraceptives. Girls especially seemed to understand the consequences of unwanted pregnancy and were eager to continue their education. While some were shyer than others, they demonstrated interest in learning

about options, especially non-invasive methods. The most popular contraceptive method was the calendar method, as there were recurring concerns about condoms becoming stuck during intercourse. Both girls and boys eagerly requested that family planning be formally integrated into their education, especially with HIV education. The girls agreed that, "If family planning information becomes a service in the school, it will help convince the teachers and the parents [that it is important]." The focus group discussions reflected a clear interest among students to learn about and access methods.

Participants did not usually link conflict to challenges in obtaining family planning services, although insecurity was mentioned by men and male students as one factor impeding access to health services. One male student additionally noted, "Instability can prevent people from continuing to use family planning from place to place. They may think there is a programme along the way or in the place of refuge."

Persistent barriers remained in terms of widespread acceptability of contraceptives, in particular a lack of awareness about them; fear of methods of use; and fear of stigma from husbands, peers, and leaders. One woman, reflecting a common sentiment, noted: "Husbands prevent wives from using the pill. If I want to use it, I use it in a secret way." Other comments pertained to the benefits of larger families, including considerations for the possibility of death among children. Men typically attributed reluctance to culture, different tribal thinking, and peer disapproval. While male students were more open-minded than adult men, faithfulness to one partner was observed as a reason for not preferring to use condoms. Female students reported that parents, teachers, and in some instances the church, served as obstacles. One girl noted: "The parents can stop us from using a method [of contraception]. The teachers can also stop us from coming to school if they see a condom in our bag." Another agreed: "The parents are a challenge. When they find out, they will consider the girl as a prostitute. She will say the girl is committing a crime."

In-depth Interviews with CBD Agents

The CBD agents reported OCPs, implants and male condoms as the contraceptive methods most requested by clients. One CBD agent noted: "People are happy because we provide OCPs for free. Before, they had to pay ten SSPs [South Sudanese Pounds; roughly $3.30 USD] for one cycle." For the most part, CBD agents appeared content with their work, especially with the recognition they received from the community. One CBD agent said, "If people see me walking on the streets, they call me to come give them

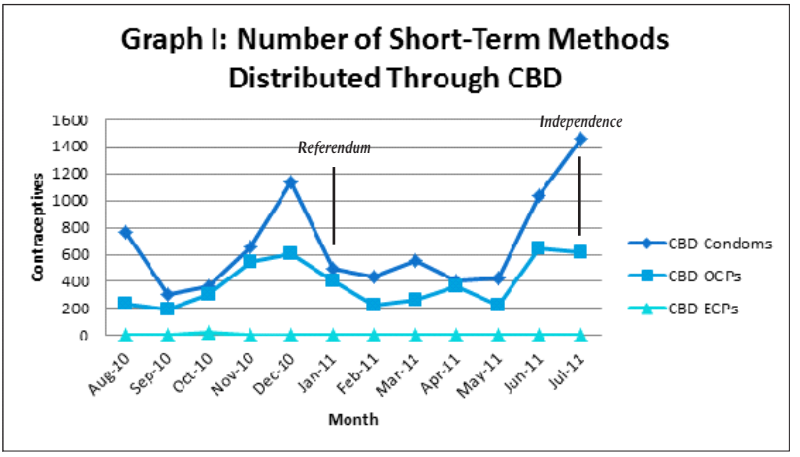
family planning supplies." Another said: "There is a lady in the community that mobilizes women. She helps me work by gathering women over tea and encourages them to learn about family planning."

All interviewed CBD agents lamented the limited salary and lack of latrines and water in the *tukuls*. Since the *tukuls* need to be staffed at all times, CBD agents reported the work hours were more challenging, with client walk-ins being unpredictable. Despite the challenges, one CBD agent voiced her enthusiasm for the project, "We want to learn how to do injections in the *tukuls* because right now, we refer to MTH or Bam for injections, implants, and IUDs."

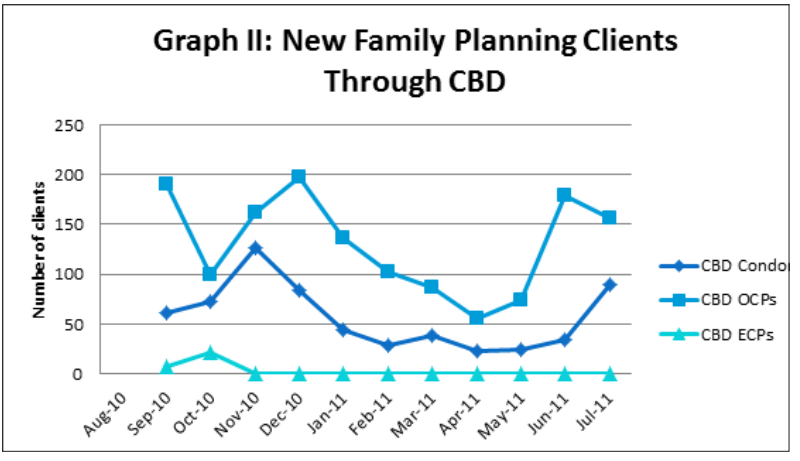
Routinely collected data

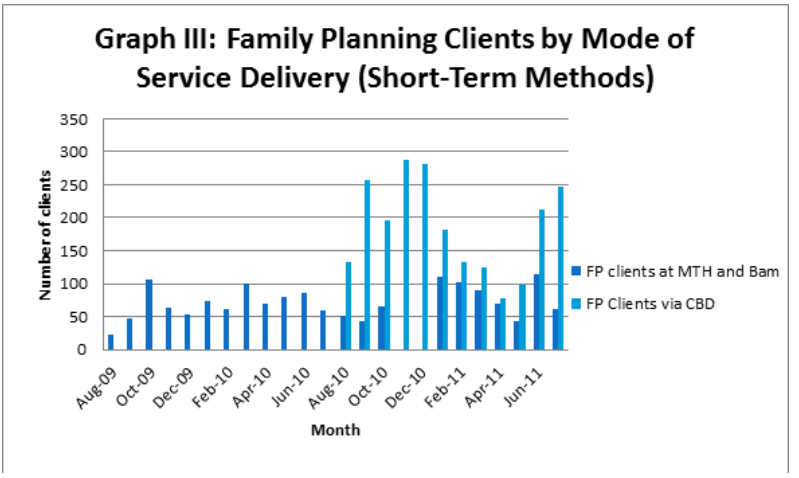
In addition to community members demonstrating need and acceptance of CBDs, routinely collected data on new clients and commodities distributed show an increase in communities' uptake of contraceptives during the project period. Throughout the course of the pilot program, the average monthly increase in contraceptives distributed by CBD agents was 19.9 per cent. This amounted to an average increase of 21.5 per cent for condoms and 22.9 per cent for OCPs (cycles) per month. Distributions decreased in January–March 2011 (between the referendum and independence) due to insecurity in Malakal County that resulted in the suspension of household visits at its peak.

The contraceptive method most requested by new clients through CBD was OCPs. Despite EC being available through the course of the project, demand was very low. On average, a 17.8 per cent monthly increase in new acceptors of condoms and a 9.3 per cent increase for OCPs were observed. Rates of family planning uptake at MTH and Bam PHCC remained relatively constant, with an average monthly increase in client numbers of 6.3 per cent. The dips in uptake can be attributed to stockouts of OCPs in May 2011, and the family planning units being closed for Independence Day. Thirteen clients were referred to MTH or Bam PHCC by CBD agents, according to facility record books. A spike in the number of condoms requested through CBD was observed in the month leading to the referendum and the month leading to Independence Day (Graph 1)



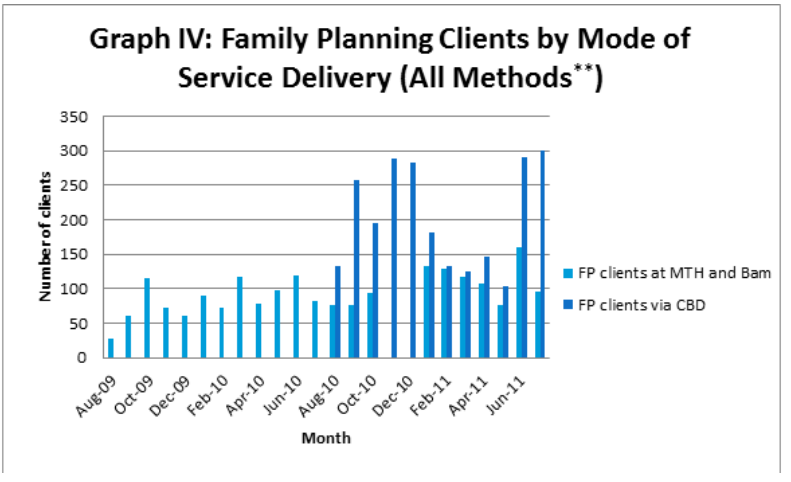
For users of OCPs, the number of new clients peaked one month before the referendum and before Independence Day (Graph II). Examining the mode of service delivery for short-term contraceptive methods (Graph III), the number of clients also peaked in November and December 2010 before the referendum, and in June and July 2011 for Independence Day.





**All contraceptive methods include male condoms, female condoms, OPCs (cycles), EC pills, IUDs, injectable contraceptives, implants/jadelle, and tubal ligation.

Similar patterns can be observed in the uptake at facilities and through CBD for all contraceptive methods (Graph IV). No marked difference was visible in uptake levels via the CBD effort or through the health facilities, except in July 2011 when the health facilities closed for Independence Day.



**All contraceptive methods include male condoms, female condoms, OPCs (cycles), EC pills, IUDs, injectable contraceptives, implants/jadelle, and tubal ligation.

Discussion

Feedback from participants in focus group discussions and routinely collected data suggest both a demand for and the feasibility of CBD in humanitarian settings, despite extended outreach being necessary. The community very much accepted the need for more awareness raising. Community members suggested training additional CBD agents, including males, to inform and educate men and women in a non-forceful way. They further recommended hands-on demonstrations, through peer groups and discussions at churches, health centres, markets, and other public places. Their feedback attested to the importance of community-based approaches in reaching those with compromised access, and gave voice to youth—including girls—reflecting their desire for information and services in the wake of their country's hard-won independence.

Systematic data collection on discontinuing users was a challenge, given the hurdles associated with instituting a comprehensive tracking system. CBD agents did not maintain specific records of home locations or regularly follow up with previous acceptors to know if a client discontinued contraceptive use. A client was instead considered as having discontinued contraceptive use if a CBD agent met with her at least twice and the client declined to continue using the method during the second visit. The tracking of defaulters was especially difficult as a result of the limited number of CBD agents, and the periodic suspension of services during bouts of insecurity. The effort is critical, however, and the knowledge base to address this in crisis settings should be further developed.

Uptake of family planning at MTH and Bam PHCC is still low. Data show new demand for both injectables and long-term and permanent contraceptive methods that could have further contributed to the multiplier effects of introducing a CBD component. However, the number of referrals was very small. With possible inconsistencies in noting referrals at MTH and Bam PHCC, it is challenging to distinguish direct CBD referrals from clients who sought a facility-based contraceptive method after having heard about it through a mass campaign or from a neighbour who encountered an outreach worker (i.e. indirect encounters). Data will continue to be collected over time.

Similar reasoning applies regarding observed changes to uptake of short-term contraceptive methods at the facilities. Given small fluctuations in the uptake of condoms and OCPs at MTH and Bam PHCC, it is not possible to speculate whether any continuing users switched supply delivery points from the standing facilities to the CBD agents with the introduction of CBD. Possible scenarios that could have occurred include

a decrease in facility-based uptake of short-term methods due to accessibility via the CBD agents, no change, or an increase in uptake as a result of an overall emphasis on raising community awareness.

Some lessons learned are similar to those documented in the literature. Potts et al., note several lessons learned from CBD programmes across Africa. Motivation is one critical component, where they recommend enabling CBD workers who sell contraceptives to keep all or part of the profits.[23] Given the humanitarian context of Malakal and South Sudan's family planning policy, CBD agents did not retain profits but were offered a small stipend and basic supplies for inclement weather. Since CBO staff were not interviewed, it was not possible to assess the RH promoter and peer educator perspectives on motivation and morale issues, which were initially characterised by frustrations regarding the lack of durable wear and low incentives. The CBD agents, however, appeared to be fulfilling their duties, and their morale had improved from when they were consulted during the mid-project assessment. Initially, they were also concerned with the challenges of working in Malakal's harsh climate, and more durable supplies and mentoring were provided to meet their needs. Recognition in the community seemed to have a positive impact on their motivation.

Another related lesson recognised by Potts et al., is the benefits of bringing outreach workers together to exchange ideas.[24] While monthly meetings were convened between CBD agents, peer educators, and RH promoters, closer coordination could have offered a medium to widen reach and coverage. Organizational capacity of the CBO posed a key challenge to the execution of the pilot project; ongoing institutional and technical support could have improved CBD agents' overall capacity.

In terms of the complexity of implementing CBD in a humanitarian setting, the heavy rainy season, with precipitation approximating 732 mm between April and October 2011,[25] was compounded by the volatility of the town, insecurity, supply gaps, and risks of gender-based violence, as in other humanitarian settings.[26] Such challenges impacted pilot implementation on a day-to-day basis. While the qualitative data did not demonstrate negative impacts of insecurity per se on the community's perceptions of family planning needs or access, this may have been because the community is accustomed to conflict and subsequent service interruptions. Routinely collected data reflect that contraceptive uptake at the facilities was curtailed by related supply shortages; OCPs were out of stock for at least three months; and injectable contraceptives had expired. The CBD effort was therefore forced to rely on a private supply chain, which increased costs overall.

Task-shifting[27] or task-sharing[28] has increasingly been discussed in the global policy arena to address the health workforce shortage, including in crisis-affected settings.[29] In recognition of the compounded challenges that arise during crises, the Global Health Workforce Alliance and the World Health Organization (WHO), among other agencies, issued a *Joint Statement on Scaling Up the Community-based Health Workforce in Emergencies* in 2010.[30] A study by Viswanathan et al., published in 2011 found that the presence of female CWHs in surveyed communities in Afghanistan was associated with a higher use of modern contraception.[31] Hence, other crisis settings are demonstrating the feasibility of CBD. In development contexts such as Uganda,[32] Madagascar,[33] and Ethiopia,[34] and even in post-conflict Maniema province in the Democratic Republic of the Congo,[35] CBD of injectable contraceptives has been demonstrated. The WHO has approved CBD of injectable contraceptives as safe, effective, and acceptable to users,[36] and while much more needs to be in place in Malakal before CBD of injectables can be realised, donors have lauded ARC's work and are supporting its replication in other counties throughout South Sudan. From the qualitative and routinely collected data, continued need and existing evidence from development contexts, CBD of family planning appears feasible and appropriate in this humanitarian setting to enhance access to family planning services for women, men, and young people.

Limitations

While outreach worker information was limited to CBD agents, mid-project data are available that have captured peer educator and RH promoter perspectives. However, the information is not comprehensive enough to determine the effectiveness of the peer educators or RH promoters. Study design and implementation may have also led to specific biases. Focus group discussion participation could be biased towards those with health-seeking behaviour since some participants were recruited from a health facility waiting area or were selected because they had encountered a CBD agent. However, given the limited reach and low knowledge levels of the community regarding family planning in general,[37] this did not appear to especially influence the qualitative data. Due to time and resource constraints, translations of the focus group discussions took place immediately following the session, with the recordings played only when questions emerged. Some possibility remains regarding missed remarks and translation error. However, every effort was made to ensure accuracy through in-depth debriefings. Due to the large size of the female student focus group discussions, it is possible that not everyone

contributed to the same degree. However, among girls, interest in family planning issues was reflected in the discussions.

Conclusion

From the gathered data and existing evidence from development settings, CBD approaches may be promising in humanitarian settings such as Malakal, where conducive factors for the approach exist and the need for more information and services is apparent. While extended outreach is required to further assess the value added by CBD in Malakal, the pilot project showed that CBD is feasible in a volatile setting that contemporaneously experienced conflict, a referendum, and independence. The community's openness to, and recognition of the approach, including from women and girls, is a testament to its promise, especially in a setting characterised by high maternal death. The majority of the ten countries with the highest maternal mortality ratios are experiencing or emerging from conflict. Given that fertility reduction can play an important role in reducing unintended and high-risk pregnancies, alternative models are needed to achieve Millennium Development Goal Five to improve maternal health. The United Nations Population Fund and other donors have since funded ARC to continue CBD of contraceptives in Malakal and to replicate the model in other counties in South Sudan.

At the time of manuscript editing, South Sudan experienced an eruption of conflict, with Malakal town as one of the hardest hit areas. Our collective experience has shown that family planning needs do not disappear in times of conflict; the authors hope that peace is urgently restored and that access to much needed RH services, including family planning, is enhanced for Malakal's women, men, and young people. ■

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Notes

[1] Article 16(1) of the "Convention on the Elimination of All Forms of Discrimination against Women" (CEDAW) notes that all individuals and couples have the

"right to decide on the number, spacing and timing of children." The "Programme of Action" from the 1994 International Conference on Population and Development also notes the right of couples and individuals "to decide freely and responsibly the number, spacing and timing of their children and to have the information and means to do so" (Article 7.3). General Comment No. 14, para. 12 of the Committee on Economic, Social, and Cultural Rights states that the right to the highest attainable standard of health includes the "right to be informed and to have access to safe, effective, affordable, and acceptable methods of family planning."

[2] Oona Campbell and Wendy Graham, "Strategies for reducing maternal mortality: getting on with what works," *Lancet* 368 (2006): 1284-99; Guttmacher Institute, "Facts on Investing in Family Planning and Maternal and Newborn Health: Updated November 2010 using new maternal and neonatal mortality data," 2010, www.womencareglobal.org, http://www.womancareglobal.org/wp-content/uploads/2012/08/Guttmacher-Facts-on-Investing-in-Family-Planning-and-Maternal-and-Newborn-Health-Nov-2010.pdf, (accessed January 30, 2014).

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