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Achieving success with family planning in rural Afghanistan

Douglas Huber, a Nika Saeedi b & Abdul Khalil Samadi c

a Management Sciences for Health, 784 Memorial Drive, Cambridge, MA, 02139, United States of America.
c STEP Health and Development Organization, Kabul, Afghanistan.

Correspondence to Douglas Huber (e-mail: DouglasHuber777@yahoo.com).

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Une traduction en français de ce résumé figure à la fin de l'article. Al final del artículo se facilita una traducción al español.

المقالة لهذه الكامل النص نسبياً في الخلاصة لهذه العربية الترجمة.

Abstract

Problem Afghan women have one of the world’s highest lifetime risks of maternal death. Years of conflict have devastated the country’s health infrastructure. Total fertility was one of the world’s highest, contraceptive use was low and there were no Afghan models of success for family planning.

Approach We worked closely with communities, providing information about the safety and non-harmful side-effects of contraceptives and improving access to injectable contraceptives, pills and condoms. Regular interaction with community leaders, mullahs (religious leaders), clinicians, community health workers and couples led to culturally acceptable innovations. A positive view of birth spacing was created by the messages that contraceptive use is 300 times safer than pregnancy in Afghanistan and that the Quran (the holy book of Islam) promotes two years of breastfeeding. Community health workers initiated the use of injectable contraceptives for the first time.

Local setting Nonprofit organization, Management Sciences for Health, Afghan nongovernmental organizations and the Ministry of Public Health implemented the Accelerating Contraceptive Use project in three rural areas with different ethnic populations.

Relevant changes The contraceptive prevalence rate increased by 24-27 points-increases of two- to almost four-fold in 8 months in the project areas. Men supported modern contraceptives once they understood contraceptive safety, effectiveness and non-harmful side-effects. Injectable contraceptives contributed most to increases in contraceptive use.

Lessons learned Community health workers can rapidly increase contraceptive use in rural areas when given responsibility and guidance. Project innovations were adopted as best practices for national scale-up.
Introduction

Women in Afghanistan have a one-in-eight lifetime risk of maternal death, the second-highest in the world, resulting from a maternal mortality ratio of 1800 maternal deaths per 100,000 live births and a total fertility rate of 6.8 births.¹,² The potential impact of contraceptive use on maternal deaths in Afghanistan was unknown; however, global estimates are that up to 35% of maternal deaths could be averted by preventing unintended pregnancies.³

Donors and Afghan policymakers believed use of modern contraceptives would be resisted and progress would be slow. After 23 years of conflict, rural services were contracted to nongovernmental organizations in the Ministry of Public Health’s new primary health-care initiative, the Basic Package of Health Services.⁴,⁵ Volunteer community health workers (CHWs) provided health care for women and children, including free contraceptives under Management Sciences for Health’s Rural Expansion of Afghanistan’s Community-based Health care (REACH) Project.

Within REACH, Management Sciences for Health initiated the small Accelerating Contraceptive Use (ACU) project, funded by the William and Flora Hewlett Foundation to strengthen contraceptive services. CHWs in REACH provided the majority of contraception under this project.⁴,⁶ The Ministry of Public Health encouraged us to initiate innovative measures to strengthen family planning.

Methods

For implementation of the ACU Project, we selected three REACH areas (Table 1) that had mature data reporting systems, no social marketing (such as selling contraceptives through pharmacies), good security and year-round access. Four Afghan nongovernmental organizations provided services: Coordination of Humanitarian Assistance, Bakhtar Development Foundation, STEP Health and Development Organization and the Agency for Assistance and Development of Afghanistan. One male and one female CHW served 100–150 households, each with one woman of reproductive age.

REACH baseline and end-of-project surveys used lot quality assurance sampling to generate contraceptive prevalence data from 13 provinces. Changes in contraceptive prevalence rate were compared between REACH and the ACU Project, which monitored prevalence rates
only from CHWs’ community maps. REACH data included women served by CHWs, clinics and a small portion served by neither.

End-of-project contraceptive use was verified by visiting 10–15 reported users for each CHW (150 users per site). We conducted sequential sampling of user households using a random start. An outside interviewer questioned each user. Injection use was verified if she could produce her client card and her next three-month injection date had not passed. Pill users needed to show a currently used pack and be able to describe correct use. These probing questions provided greater assurance of actual use than typical surveys. Dialogues with community leaders, families, clinic staff and religious leaders provided a solid understanding for developing innovations, which were tested and accepted in the three areas over a period of 8 months.

Many providers and community leaders believed contraception was more dangerous than pregnancy. Other misconceptions by doctors, midwives and communities included: (i) modern contraceptives cause infertility; (ii) injectable contraceptives reduce breast milk and should not be used postpartum until menstruation; (iii) women who work hard or have six or more children will expel an intrauterine device; (iv) progestin-only pills can be used interchangeably with combined pills.

We updated contraceptive information, used quotations from the Quran (the holy book of Islam) on birth spacing, and educated women and men about correct use and common non-harmful side-effects. Short written guidance for couples on oral and injectable contraceptives was given to all 3708 families in the project. Each method had a verse from the Quran, approved by the mullahs (religious leaders), advocating two years of breastfeeding/pregnancy spacing. Messages for injectables stressed their effectiveness and safety, explained changes in menstrual bleeding and pointed out that a woman’s fertility returns about 7 months after the last injection. Similarly, we communicated that oral contraceptives are safe and effective if used every day, can be used at any age, fertility returns when stopped and that menstrual bleeding is usually reduced, which is normal and healthy.

Simple instructions for use were included. Non-literate women found family members or neighbours who could read the instructions, and mullahs used the instructions to educate communities. Job aids for CHWs had similar information plus guidance on managing side-effects.
Our estimate that contraceptive pills and injections were about 300 times safer than pregnancy was based on documented oral contraceptive mortality compared with Afghanistan’s maternal mortality ratio.7,8 We assumed 5 deaths attributable to contraceptives per 100 000 woman-years, since medical screening and follow-up were basic, and 1500 deaths per 100 000 women not using contraceptives per year, assuming 85% would become pregnant. Our risk-benefit message was easily understood by providers and communities.

Mullahs’ concerns centred on safety and infertility, rather than religion. Through dialogue, all 37 mullahs in the project areas accepted the concept of birth spacing using modern contraceptives. This does not imply that all Afghan mullahs will quickly endorse modern contraceptives.

Birth spacing of 3–5 years compared with less than 15 months is associated with a 2.4-fold increase in child survival to 5 years and a 2.5-fold improvement in maternal survival.9 With this information, several mullahs began emphasizing the importance of birth spacing during Friday prayers.10 The Ministry of Public Health gave permission for CHWs to give the first injection of Depo-Provera® (medroxyprogesterone acetate) on a pilot basis. CHWs were previously restricted to giving only second and subsequent injections.

Results
The REACH Project achieved an increase of contraceptive use from 16% to 26%, over a period of 2 years in 13 provinces. The ACU Project increased contraceptive use by 24-27 percentage points—increases of two- to almost four-fold in its three sites over 8 months (Fig. 1). Overall, contraceptive users increased from 532 to 1469 among the 3708 women. In Farza, usage increased from 188 to 726 among 2136 women; in Islam Qala, from 168 to 370 among 840 women; and in Tormay, from 176 to 373 among 732 women.

Use of injectable contraceptives increased most, which we attribute to training CHWs to initiate their use with good counselling. People welcomed the introduction of injectables because walking to a clinic required a two-to-four-hour round trip.

Oral contraceptive use varied, decreasing slightly in Tormay, increasing substantially in Farza and changing little in Islam Qala (where injectables were popular). Condom use increased dramatically in Tormay but remained low in other areas. The Hazara ethnic group from Tormay,
many of whom went to the Islamic Republic of Iran during the Taliban regime, had experience with condoms. Mullahs also used condoms themselves and, in Tormay, pictorial instructions for condom use were acceptable when used by CHWs for teaching correct use.

Discussion
The rapid uptake of contraceptives in conservative rural communities and the endorsement of this model by the Ministry for Public Health for national scale-up were unique for Afghanistan. We attribute these achievements to: (i) crafting family planning interventions after in-depth discussion with community leaders, both men and women; (ii) engaging women in supervising CHWs and organizing women’s community health committees (shuras); (iii) overcoming widespread misconceptions of infertility and harm from contraceptives, some being inadvertently perpetuated by training on rare adverse effects and medical screening; (iv) using international expertise to create positive, technically sound counselling messages; (v) emphasizing contraceptive safety compared to pregnancy risk; (vi) educating people about birth spacing for child and maternal health consistent with Islamic teaching; (v) involving men, especially mullahs, in contraceptive education and promotion of birth spacing; (vi) ensuring abundant contraceptive supplies; (vii) collaborating closely with the Ministry for Public Health for approval of innovations and dissemination of findings.

Meetings with religious and other community leaders, including health committees, CHWs and couples were important for developing trust and confirming acceptance of innovations, such as permitting CHWs to initiate injectable contraceptives.

The use of injectables by CHWs has proved safe and acceptable in other rural Muslim populations.11,12 Recent community trials in Uganda show that CHWs compare favourably with clinics in standards of care for providing injectables.13

Study limitations include lack of a formal control group. However, having no competing inputs, changes can be attributed to the ACU Project. REACH provided a reasonable source for comparative data. Replication may be challenging, given the need for in-depth dialogue, international technical expertise and skilled coaching. The project’s short life precluded data collection on long-term contraceptive prevalence rates. Sustainability could not be assessed, though the national expansion will produce information on future progress.
Monitoring and evaluation were ongoing to ensure accurate recording of contraceptive users on community maps, track progress and support CHWs and communities. Skilled project managers, who related well to the community, learned about misconceptions and devised effective interventions, contributed greatly. Sound job aids and information for households enabled rapid progress.

Contraceptive use is crucial for reaching the United Nations’ Millennium Development Goals. Obstacles to contraception use include lack of access, misperceptions, low status of women, inappropriate standards and provider attitudes. This project’s flexible, culturally sensitive approach will apply in many rural societies.

Conclusion
Contraceptive use increases rapidly in rural settings when CHWs receive support and guidance. Revitalizing family planning requires a new risk-benefit paradigm comparing contraceptive risks to those of pregnancy and refocusing on community needs rather than medical screening. Having seen that simplified delivery systems succeed, the Ministry of Public Health adopted the ACU Project model for scaling up contraceptive services nationwide.

Acknowledgements
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Competing Interests:
None

Lessons learned
Traditional rural communities will rapidly accept modern contraceptives, particularly injectables, introduced by community health workers when people are educated about common non-harmful side-effects and correct use.

Medical misconceptions were more important than cultural and religious barriers. Men’s involvement was vital in supporting their wives’ use of birth spacing. Once educated, men demonstrated positive practices about birth spacing for maternal and child health.
References


Comment [S1]: Medline indexes “Bangladesh Med J” but cannot find a listing for the reference 12 “Khan, Huber, 1978”. Please check the reference for accuracy.
Table 1. Site information for the Accelerating Contraceptive Use project, Afghanistan

<table>
<thead>
<tr>
<th>Nongovernmental organization</th>
<th>Location</th>
<th>Community health workers</th>
<th>Health posts</th>
<th>Households in health post catchment areas</th>
<th>Sect</th>
<th>Ethnicity of the majority of the population served</th>
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<td>20</td>
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<td>732</td>
<td>Shi’i</td>
<td>Hazara</td>
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<td>Islam Qala, Herat Province</td>
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<td>10</td>
<td>840</td>
<td>Sunni &amp; Shi’a</td>
<td>Tajik, Pashtun &amp; other</td>
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<td></td>
<td>Farza, Kabul Province</td>
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<td>15</td>
<td>2 136</td>
<td>Sunni</td>
<td>Pashtun</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>65</td>
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<td>3 708</td>
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</tbody>
</table>

Fig. 1. Contraceptive prevalence rates in the Accelerating Contraceptive Use and Rural Expansion of Community-based Health care projects, Afghanistan.

* Accelerating Contraceptive Use project data represent remote rural households served almost exclusively by community health workers.

b Rural Expansion of Community-based Health care project data represent households served by community health workers or clinical staff at health facilities, and some households with no ready access to services.