

# Comprehensive Abortion Care Pilot Project in Tigray, Ethiopia

## Final Report in Brief

Every year, nearly 47,000 maternal deaths and hundreds of thousands of disabilities occur globally as a result of unsafe abortion, the vast majority in developing countries.<sup>1</sup> With the second largest population in sub-Saharan Africa, high fertility and low contraceptive use, Ethiopia could significantly reduce the burden of maternal death by increasing access to both safe abortion services and modern methods of contraception. Ethiopia's maternal mortality ratio is 673 deaths per 100,000 live births, and it has been estimated that 32% of maternal deaths result from unsafe abortion.<sup>2,3</sup> The availability of medication abortion has the potential to increase access to safe abortion services and increase quality of care in places where the skills and equipment necessary to provide surgical evacuation are lacking. In addition, expanding the level of health facility and provider trained in safe abortion services can increase women's access to these services, especially in rural areas.

the provision of CAC services in Ethiopia and to contribute to a reduction in morbidity and mortality due to unsafe abortion.

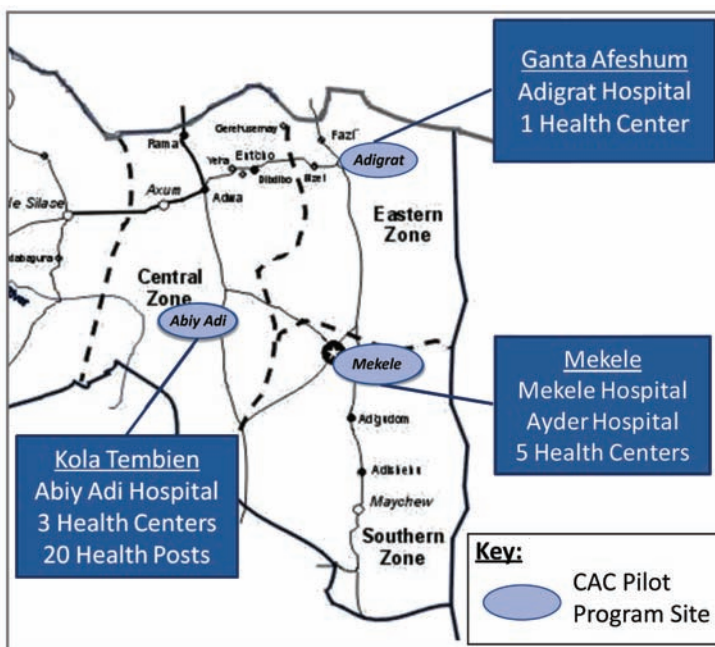
### PROJECT DESIGN

The design of this project included five strategies to assure a successful integration of CAC services at every level of the health system:

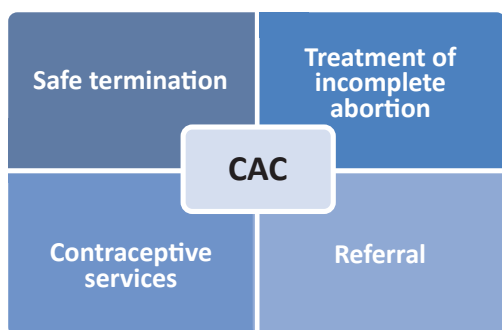
- Development of service delivery guidelines and medical protocols by level of health care provider and health facility for safe abortion services;
- Training of all providers, including health extension workers (HEWs), in pilot health facilities to integrate the components of CAC at the health post, health center and hospital levels (Figure 2);

In May 2009, the Tigray Regional Health Bureau in Northern Ethiopia, the Bixby Center for Population, Health and Sustainability at the University of California, Berkeley, and Venture Strategies Innovations (VSI) initiated a pilot project on comprehensive abortion care (CAC) services. The pilot project was undertaken in four hospitals, nine health centers, and twenty health posts in three zones of Tigray Region, Ethiopia (Figure 1). The project aimed to provide empirical evidence to inform the development of service and clinical guidelines for

Figure 1: Sites of CAC Project: Tigray, Ethiopia



**Figure 2: Components of CAC**



- Provision of safe abortion services, including safe termination and treatment of incomplete abortion, at all levels of the health care system by a variety of cadres of health providers;
- Postabortion contraceptive services for all women seeking safe abortion services, including counseling, provision of all available methods and referrals; and
- Establishment of clear referral linkages at every level.

## RESULTS

Health centers and hospitals collected data on CAC service provision from July 2009 through September 2010 (15 months). HEW provision of CAC services was implemented in two phases (over 18 months) to continually monitor and evaluate their ability to provide safe abortion services:

### Phase 1

(July – December 2009)

HEWs assessed clients presenting for safe abortion services, including determination of uterine size in weeks gestation, and then referred clients to a health center or hospital to verify the uterine size and receive treatment.

### Phase 2

(January – December 2010)

HEWs provided safe termination and treatment of incomplete abortion with misoprostol, referring clients per clinical protocols.

The data in this analysis includes information collected on *Service Delivery Forms* from 4,354 women seeking safe abortion services at pilot health facilities, and 2,210 client exit interviews. Just over half of the cases were seen at hospitals (63%), including complicated cases and those with greater uterine size (Table 1). However, a significant proportion of the case load presented at health centers and health posts (38%).

### HEWs are capable of providing high-quality safe abortion services

HEWs were effective in providing safe abortion services to women at the health post level. During Phase 2, 66

women sought safe abortion services at health posts. HEWs performed safe termination with misoprostol on 43 of these women, treated seven cases of incomplete abortion with misoprostol, and referred 16 women due to uterine size or complications. Therefore, HEWs demonstrated that they could follow treatment and referral protocols correctly, understanding their capacity to treat clients at the health post level and referring women to higher level facilities if they did not have the resources or skills to treat them.

### Nurses provided the majority of abortion-related services at both health centers and hospitals

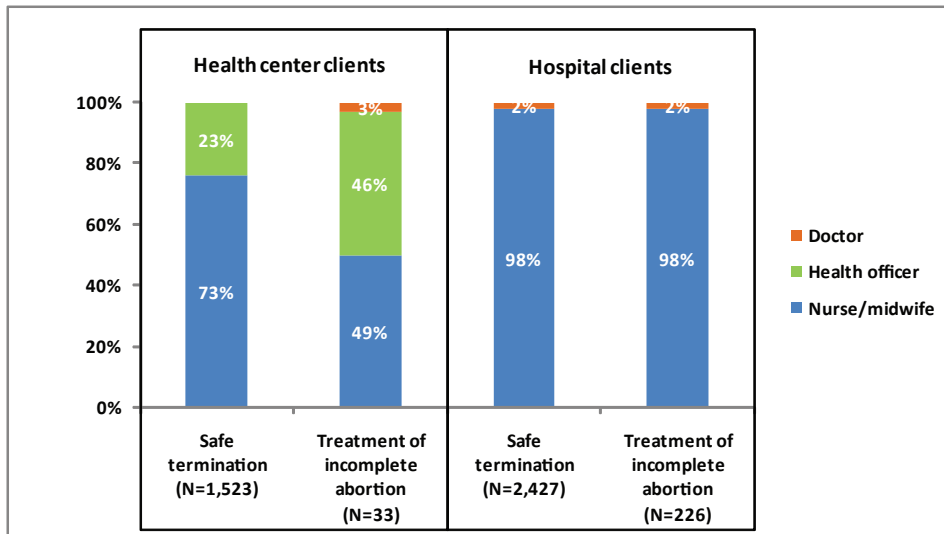
At health centers, nurses performed approximately three-quarters of safe terminations (73%) and treated almost half of the cases of incomplete abortion (49%); health officers treated the majority of the remaining clients (Figure 3). At hospitals, nurses performed nearly all safe termination (98%) and treatment of incomplete abortion (98%) procedures. Doctors performed only 2% of each procedure. Shifting the majority of the caseload to mid-level providers reserves higher level providers for complicated cases, consequently conserving both human and financial resources within the health care system.

**Table 1: Abortion-related case load at pilot facilities**

Facility	N=4,354
Health post	78 (1.8%)
Health center	1,556 (35.7%)
Hospital	2,720 (62.5%)

Source: *Service Delivery Form*

**Figure 3: Provider of abortion-related services by facility level and type of service<sup>^</sup>**



Source: Service Delivery Form

<sup>^</sup>Note: no response on provider from 3.7% of clients seeking safe termination in health centers and 0.3% of clients seeking safe termination in hospitals.

**Quick adoption of medication methods**

The majority of safe termination procedures (94%) across all levels of health facility and over three-quarters of cases of treatment of incomplete abortion at health posts and health centers were treated with medication methods (either mifepristone-misoprostol or misoprostol only).

**Rates of completion as expected for both safe termination and treatment of incomplete abortion using medication methods**

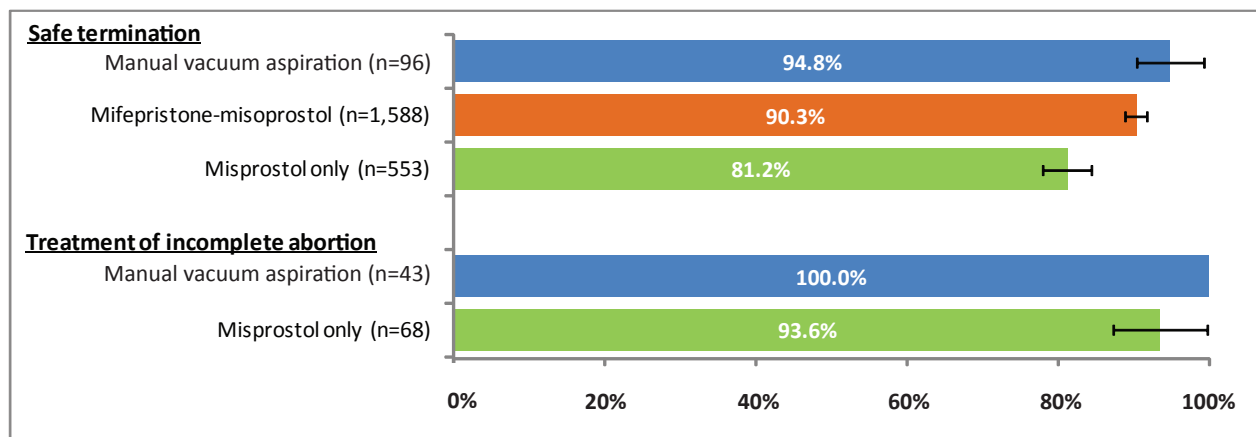
Completion rates were high for all three methods of uterine evacuation, as illustrated in Figure 4. For safe termination, misoprostol alone resulted in a complete procedure in 81.2% of clients (95% CI 77.9% to 84.5%); mifepristone-misoprostol in 90.3% of women (95% CI 88.8% to

91.8%); and manual vacuum aspiration (MVA) in 94.8% (95% CI 90.3% to 99.3%). Misoprostol alone had a completion rate of 93.6% for treatment of incomplete abortion (95% CI 87.3% to 99.8%). MVA resulted in a 100% completion rate for treatment of incomplete abortion. Providers used misoprostol to complete half of the safe terminations initiated with misoprostol alone (58 out of 103 cases; 56%) and a third of cases initiated with mifepristone-misoprostol that were not complete at the follow-up visit (57 out of 153 cases; 37%).

**Referrals made according to service delivery protocol**

While patients were able to obtain safe abortion services at all levels of the health care system according to project protocols, each pilot site was linked to a referral facility. Just as HEWS demonstrated their capacity to refer, providers at health centers consistently referred women according to protocols for uterine size and complications that could not be

**Figure 4: Completion of procedure by treatment method<sup>^</sup>**



Source: Service Delivery Form

<sup>^</sup>Excludes clients treated for intrauterine fetal death, treated with evacuation and curettage, treated with mifepristone-misoprostol for treatment of incomplete abortion, and women who were referred before treatment at their initial visit.

## Client perspectives

*"I am satisfied to get such service in my vicinity. If this service continues, it is my belief that many problems of women will be solved."*

– Safe termination client, health center, age 24 (parity 0)

*"The availability of such service in a health post is excellent."*

– Safe termination client, health post, age 24 (parity 2)

*"This is a new hope for women's health."*

– Safe termination client, health center, age 26 (parity 2)

handled given the resources available at their facilities.

### Most women received postabortion contraceptive services

Both provider and client reports showed that the vast majority of women received family planning counseling (over 85%). The most common contraceptive methods given to women were injectables (47%) and oral contraceptive pills (15%). Women were more likely to leave their initial visit without a contraceptive method at hospitals (11%) than health centers (6%) or health posts (1%). This finding demonstrates that postabortion family planning in hospitals needs to be strengthened.

### High client satisfaction with all three methods and quality of care received

Women were very satisfied with their providers, services received, treatment method, and facilities.

Most women (99%) rated their overall experience as "good." The only negative experience reported frequently by women was that they did not get to spend enough time with their provider, particularly at hospitals. Of the women who received medication methods, over 73% would recommend this treatment to a friend, compared to 51% of women who were treated with surgical methods.

### CONCLUSIONS

In providing care to a total of 4,354 women over the course of 18 months, this pilot project demonstrated that quality CAC services can be provided at all levels of the health care system, including at health posts. All health providers, including HEWs, provided safe and high-quality abortion services to women. HEWs are an integral part of the primary health care system in Ethiopia, and this project provides strong evidence that HEWs are able to provide safe, high-quality CAC

services to women in rural communities of Ethiopia. The wide acceptance and rapid adoption of medication methods seen in this pilot project illustrate the important role medication has in increasing access to comprehensive abortion services for women. These findings show that medication methods are comparable in feasibility, acceptability and safety to surgical methods, and allow more providers not trained in surgical methods to provide safe abortion services.

### ACKNOWLEDGEMENTS

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<sup>1</sup>Singh S, Wulf D, Hussain R et al. Abortion Worldwide: A Decade of Uneven Progress. Guttmacher Institute; 2009.

<sup>2</sup>Ethiopia Demographic and Health Survey 2005. Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Agency [Ethiopia] and ORC Macro; 2006.

<sup>3</sup>Gebrehiwot Y, Liabsuetrakul T. Trends of abortion complications in a transition of abortion laws in Ethiopia. *Journal of Public Health* 2008;31(1):81-7.