The impact of Ghana's R3M program on the provision of comprehensive abortion care services

Fatima Juarez*, Aparna Sundaram*, Clement Ahiadeke**, Akinrinola Bankole*, Susheela Singh*, Nakeisha Blades*
*Guttmacher Institute, New York
**Institute for Statistical, Social, and Economic Research

Introduction

Despite a progressive abortion law[1], which is one of the most liberal in sub-Saharan Africa, the abortion related maternal mortality situation in Ghana remains a matter of concern. Compared to an average of 240 maternal deaths per 100,000 live births in the developing world as a whole, the MMR for Ghana is estimated at 350 maternal deaths per 100,000 live births in 2010 (WHO 2012). Among the biggest contributors to these alarmingly high levels of maternal mortality were complications due to unsafe abortions (GHS et al 2009). Estimates from the 2007 Ghana maternal health survey shows that the national abortion rate is about 15 per 1000 women of reproductive ages (15-44)[2], and that about 40% of the women in this age group went to an untrained provider to obtain an abortion. This drastically increases the odds of the abortion being unsafe, and therefore dangerous to a woman's life.

Worryingly, evidence suggests that most Ghanaians, including health care providers, are ignorant of the abortion law which may be, in part, due to the fact that the health policy did not incorporate safe abortion procedures (Lithur, 2004; IPAS 2008). In a 2007 study (Morhee et al. 2007), about half the physicians surveyed were aware of the abortion law, the remaining were either not aware of all the conditions under which it was allowed, or they believed that it was illegal. This ignorance of the law, coupled with the prevailing social and religious stigma associated with abortion, drives the practice underground resulting in women seeking the procedure from untrained providers or attempting to self-induce a pregnancy termination (Hill et al., 2009).

In 2003, after the African Union adopted the Protocol on the Rights of Women in Africa, which recognizes the right of women to safe, elective abortion for a range of indications (Hessini et al. 2006), more changes were made to Ghana's reproductive health policy in an effort to reduce the

[1] The 1985 law states that an abortion performed by a qualified medical practitioner is legal if the pregnancy is the result of rape, incest or "defilement of a female idiot"; if continuation of the pregnancy would risk the life of the woman or threaten her physical or mental health; or if there is a substantial risk the child would suffer from a serious physical abnormality or disease (Morhee and Morhee, 2006).

[2] This is an underestimate given that it is obtained from a face to face questionnaire; however, the level of untrained providers used by women gives a degree of the severity of abortion complications.

high toll of maternal deaths resulting from unsafe abortions including the release of a guideline for the provision of comprehensive abortion care services (CAC), including safe abortion procedures within the limits of the law (GHS, 2005).

In an effort to ensure a proper implementation of the revised policy, a program called "Reducing Maternal Mortality and Morbidity" (R3M) was launched by the Ghana Ministry of Health in partnership with a consortium of international health organizations[3] in 2006. The aim of the program was to increase access to comprehensive abortion care and family planning services in order to reduce unwanted pregnancy and health complications and deaths caused by unsafe abortion (Aboagye et al. 2007). The R3M program was initiated in three regions – Greater Accra, Ashanti, and the Eastern region, and within these regions, a total of 7 districts were chosen for the implementation of the various components of program (see Table 1). The timeframe for the first phase of the program was between 2006 and 2008, but it was later extended to 2009. Phase II of the program was implemented between January 2010 and December 2011, during which the activities in the existing districts continued while two additional districts in each of the R3M regions were added (Reducing Maternal Mortality and Morbidity, 2010). Phase III of the R3M program is currently underway, and includes all the districts in the three regions. Activities of the consortium include community mobilization and dissemination of information to sensitize the community and health care providers, provision of relevant trainings for service providers, and provision of services and products.

Using a quasi-experimental approach, this paper will determine whether effort to implement the Ghana Comprehensive Abortion Care guidelines through the activities of the R3M consortium has made a difference in the provision of comprehensive abortion care services including contraceptive counseling, in the country. Public and private health facilities involved in the R3M program will be compared to health facilities without or with very limited involvement with the R3M program with respect to their capacity to provide and actual provision of safe abortion care and post abortion contraceptive services. We will explore health care provider's knowledge about and attitudes towards abortion and the abortion law and how these relate to the provision of safe abortion and contraceptive services. We will also examine other barriers to safe abortion provision, including stigma, that providers face. Since prior research shows that health providers often do not give women the abortion care they need owing to lack of knowledge of the law, or because it interferes with their religious beliefs, an examination of the impact of the interventions under the R3M program would help us understand if efforts to implement the new guidelines have made a difference in the abortion and contraceptive services provided by the doctors and midwives four years after the inception of the R3M program.

Data and Methods:

[3] The consortium partners are IPAS, Engender Health, Marie Stopes International, Population Council, and the Willows Foundation.

Data for this paper will come from a survey of doctors and midwives involved in provision of gynecological and obstetric care in selected public and private health facilities in Ghana. We are currently in the final stages of administering the survey which aims to assess the knowledge, attitudes, and practices (KAP) of the health providers with respect to CAC, in various districts in Ghana. The goal is to collect data from 168 primary, secondary and tertiary health facilities (118 public and 51 private) with capacity to provide some gynecological services. Out of the 168 facilities, 74 are health facilities that benefited from the R3M program in the original seven districts located in three regions (Greater Accra, Ashanti and Eastern). Another 51 facilities are located in 15 districts from the same three regions as the R3M regions, but not the R3M districts. These facilities are not involved with the R3M program. The last 43 facilities are located in 7 districts in the Brong Ahafo region, which is not an R3M region, and so none of the facilities in this region are associated with the R3M program. At least three providers are being interviewed in each of the selected tertiary and secondary facilities and two in each of the primary facilities.[4]

The data collection, which is currently underway, is being undertaken through a face-to-face interview of the health providers using a structured questionnaire[5]. The questionnaire seeks information on the following topic areas:

1. The characteristics of the selected health facilities.
2. The type of services the facility provides.
3. When did the facility become a part of the R3M program?
4. Demographic characteristics of the health providers.
5. Their education and type of professional training received prior to being inducted into the R3M program.
6. The training they received under the R3M program in the area of providing CAC including safe abortion care.
7. Their number of years of experience.
8. The factors that motivate them to work in this field.
9. The health providers' knowledge of the abortion law, including the conditions under which abortion is legal.
10. The extent to which they are involved in provision of safe abortion services.

[4] Some facilities did not have the minimum number of providers due to lack of staff.

[5] Since Ghana is an English speaking country, the questionnaire will be administered only in English.

11. The attitudes, beliefs and perceptions of health care providers towards safe abortion, unsafe abortion, post abortion care, contraceptive counseling, and abortion-related maternal morbidity and mortality.

12. The obstacles they face in providing these services.

13. For providers who are midwives, we would like to ask if they face any resentment from doctors in their field; and conversely for providers who are doctors, we would like to ask what they think about midwives providing CAC services.

14. The attitude of the health facility's management to providing comprehensive abortion care.

15. Their views about how the current situation can be improved.

Since the data structure is in the form of a quasi-experiment, we will have three analysis groups: The providers in the 74 R3M facilities will constitute the treatment group, those in the 51 health facilities in the R3M regions, that are neither in R3M districts nor participating in the R3M program, will be the first control group, while the providers in the facilities in the non R3M region of Brong Ahafo will be considered as the second control group. The rationale for this design with two control groups is that the first group, though not located in the R3M districts may indirectly benefit from the R3M intervention by being close to the R3M programs geographically (located in the same regions); the second group will be much less likely to benefit from the R3M intervention as the first group because of their geographical separation from the R3M districts. We assume that although the providers in the non R3M facilities will also be exposed to some CAC related interventions, mostly through non R3M member organizations, these programs will not be as intense as the R3M program. With this assumption, the hypothesis we test in this paper is whether health care providers in the seven R3M districts have better knowledge of the abortion law, have more favorable attitudes towards safe abortion and provision of contraception, and provide (more) safe abortion and contraceptive services than their counterparts in the other districts where the R3M program was not present.

Propensity score matching (PSM) technique will be used to analyze the data from the survey. Other studies have shown PSM to be an effective technique in simulating an experiment and measuring treatment impacts in non-experimental studies, especially in post-test only studies such as this one (JSI, 2007; Stuart, 2010). PSM is appropriate for this kind of analysis because it ensures that the subjects in the treatment and control groups are matched by major characteristics or factors that can influence the outcome with the exception of the key factor of interest. In the current case, we will attempt to match the health care providers by as many factors as possible so that the main difference between them will be the degree of exposure to programs that promote awareness of and access to comprehensive abortion care in Ghana.

Because of the possibility of endogeneity, whereby the providers who report exposure to programs that promote information and services on abortion are those who are predisposed to favoring the provision of safe abortion services to start with, we will also use the Instrumental Variable Technique to tease out the impact of exposure to abortion programs on providers' knowledge, attitudes and practice relating to provision of safe abortion. The Instrumental Variable technique helps to control for the possibility of reverse causation between outcome and explanatory variables (Bankole et al, 1996; JSI, 2007).

Expected findings:

We expect the findings of the paper to confirm our hypothesis that providers in the districts where the R3M program has focused its interventions will have significantly better KAP regarding abortion law and safe abortion provision compared to providers in the non-R3M facilities. It is also expected that providers in the R3M districts will experience less real and perceived stigma associated with safe abortion service provision than their counterparts in the non-R3M districts. Although it will not be measured directly in this study, the expected outcome will suggest that women in the R3M districts will be more likely to have access to safe abortion services than women in the non-R3M districts.

Conclusions:

The findings of our paper are expected to help policy makers and program planners assess the success of the current comprehensive abortion care policy and the efforts to implement it. The findings will also help to identify challenges to successful implementation of the policy and to develop future strategies or interventions to remove those obstacles, in order to significantly reduce maternal morbidity and mortality in Ghana.

References:

Aboagye, Patrick K, Hailemichael Gebreselassie, Gloria Q. Asare, Ellen M. H. Mitchell, and Josephine Addy. 2007. *An Assessment of the Readiness to Offer Contraceptives and Comprehensive Abortion Care in the Greater Accra, Eastern, and Ashanti Regions of Ghana*. Chapel Hill, NC:Ipas.

Ahiadeke, Clement. 2001. "Incidence of Induced Abortion in Southern Ghana." *International Family Planning Perspectives* 27(2):96-108.

Bankole, A, G Rodriguez, and C. F. Westoff. 1996. The Mass Media and Reproductive Behaviour in Nigeria. *Journal of Biosocial Science* 28: 227-329.

Ghana Statistical Service, Ghana Health Service, and Macro International Inc. 2009. *Ghana Maternal Health Survey 2007*. Calverton, Maryland, USA:GSS, GHS, and Macro International.

Ipas. 2008. *Ipas in Ghana*, Chapel Hill, NC, USA: Ipas.

JSI. 2007. *Evaluation of the African Youth Alliance Program in Ghana: Impact on Sexual and Reproductive Health Behavior Among Young People*. Rosslyn, VA: JSI Research and Training Institute.

Lithur, N.O. 2004. Destigmatising Abortion: Expanding Community Awareness of Abortion as a Reproductive Health Issue in Ghana, *African Journal of Reproductive Health*: 8(1):70-74

Morhee, R. A. S. and E. S. K. Morhee. 2006. "Overview of the Law and Availability of Abortion Services in Ghana." *Ghana Medical Journal* 40(3):80-86.

Stuart, E. A. 2010. "Matching Methods for Causal Inference: A Review and a Look Forward." *Statistical. Science* 25(1):1-21.

World Health Organization, UNICEF, UNFPA, and the World Bank. 2010. *Trends in maternal mortality: 1990 to 2008*. Geneva: World Health Organization.

Table 1: R3M Implementing Districts

Region	Original Districts	New Districts (as from 2010)
Greater Accra	Accra Metro	Ledzekuku Krowor
		Accra Metro
	Tema Municipal	Ashiaman Muni
		Tema Metro
Ashanti	Kumasi Metro	Kumasi Metro
	Adansi North	Adansi North
Eastern	Birim South	Birim Central
		Birim South
	New Juaben	New Juaben
	Akwapim North	Akwapim North