

ORIGINAL RESEARCH ARTICLE

Barriers to Sustainable MVA Supply in Ghana: Challenges for the Low-Volume, Low-Income Providers

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ABSTRACT

Multiple studies have demonstrated that manual vacuum aspiration (MVA) is ideal for surgical uterine evacuation in low-resource settings such as Ghana, but developing a sustainable supply to MVA has been challenging. In 2007 a situational analysis was conducted in Ghana to identify barriers to sustainable MVA supply. Information about MVA availability was gathered in seven regions of Ghana and obtained through background literature, unpublished data and reports, and 70 informational interviews with stakeholders involved with MVA policy, manufacturing, procurement, distribution, supply, training, and provision. The findings revealed that despite consensus about the dire need for MVA in Ghana, developing sustainable access to MVA instruments has proven difficult. In the public and the private health sectors, procuring MVA equipment has been particularly challenging for low-income, low-volume service providers. Research findings yielded ten recommendations for improving sustainable access to MVA, including the implementation of a revolving purchase mechanism for health provider associations, such as the Ghana Registered Midwives Association (*Afr J Reprod Health 2009; 13[4]:73-80*).

RÉSUMÉ

Obstacles à la fourniture viable de l'APM au Ghana : Défis pour les dispensateurs à bas volume, à faible revenu. Des études multiples ont démontré que l'aspirateur pneumatique manuel (APM) est idéal pour l'évacuation chirurgicale de l'utérin dans les mini lieux à basse ressource tel le Ghana, mais l'élaboration d'une fourniture viable à l'APM a été un défi. L'objectif de cette recherche était d'identifier les obstacles à la fourniture d'APM. Nous avons recueilli des informations concernant la disponibilité de l'APM dans sept régions du Ghana ainsi qu'à travers des documents de base, des données et des rapports inédits et 70 interviews informationnelles avec les intéressés associés à la politique, la production, la procurement, la distribution, la fourniture, la formation et l'approvisionnement de l'APM. Les résultats ont montré que malgré le consensus à l'égard de la nécessité d'avoir l'APM au Ghana, il a été difficile d'élaborer un accès durable aux instruments de l'APM. Dans les secteurs publics et privés de la santé, l'approvisionnement des matériels de l'APM a été surtout difficile pour les prestataires à faible revenu et à bas volume. Les résultats obtenus ont engendré dix recommandations une amélioration de l'accès durable à l'APM, y compris la mise en œuvre d'un mécanisme d'achat pour les associations des dispensateurs des soins médicaux telle l'Association des Sages-Femmes du Ghana (*Afr J Reprod Health 2009; 13[4]:73-80*).

KEYWORDS: Manual vacuum aspiration, Ghana, Nurse midwives, Revolving purchase mechanism, Abortion, Postabortion care

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Introduction

In *Decentralizing Postabortion Care in Africa: A Call to Action* (1999), Dr. Eunice Brookman-Amisshah and other leading postabortion care (PAC) pioneers in Ghana made the following recommendation number one when designing a strategy for PAC decentralization: “1. Policies must clearly address the issues of who will provide services, what will be provided, what equipment will be available, and how training and supervision will be conducted.”¹

That paper was published after the 1996 landmark study in the Eastern Region of Ghana where nurse midwives demonstrated their ability to provide comprehensive PAC with manual vacuum aspiration (MVA).^{1,2} MVA was recognized as a safe and cost-effective method for surgical uterine evacuation (UE) services, including endometrial biopsy, menstrual regulation, first trimester abortion, and PAC. While MVA is the surgical procedure of choice in many developed countries, it also has the advantage that it is ideal for low resource setting such as Ghana, because it is simple and inexpensive to manufacture, easily transportable, and operates without electricity or piped water.³

Based on the success of the study, and in recognition of the numerous benefits of MVA, the Ministry of Health (MoH) authorized sub-district level nurse midwives to manage and treat incomplete abortion with MVA. Ghana became one of the first countries in Africa to

implement PAC with MVA as a component of family planning. Ghana also became a role model for utilizing an existing network of lower-level providers to offer life-saving services in a low resource setting.

At the November 2007 PAC Consortium in the United States, barriers to MVA procurement and supply were identified as a major impediment to sustainable comprehensive abortion care (CAC) and PAC services in Ghana. Among 90 public health facilities in the three most urban regions of Ghana, only 24% offer PAC and 13% offer legal abortion.⁴ With limited MVA availability, and few facilities providing UE services, it is little surprise that an estimated 22-30% of Ghana's maternal mortality (540/100,000 live births) is the result of unsafe abortion.^{2,5}

Methods

A situational analysis was conducted to assess barriers to sustainable MVA supply in Ghana from June through August, 2007. Data was gathered in seven regions and information was obtained through: background literature, unpublished data and reports; and 70 informational interviews with stakeholders involved with MVA policy, manufacturing, distribution, procurement, supply, training, and provision. Participants ranged from low-resource setting service providers and warehouse stock keepers to senior government policy makers. Health providers were included in the study only if they were previously trained to provide MVA.

Twenty-four nurse midwives and sixteen physicians were interviewed. Sixty-five of the interviews were face-to-face interactions, and five were on the telephone. Thirty-one of the interviewees identified as current employees for the public health sector, 32 identified with the private health sector only, and 8 were currently working for both.

Results

The interviews revealed that following the pilot study with nurse midwives in the mid-1990s, MVA was added to the List of Essential Medicines & Supplies and the National Safe Motherhood Program extended clinical trainings to include MVA. These were great accomplishments by the Government of Ghana, but otherwise there was little effort to scale-up MVA supply, which would have required an investment by donors that was not forthcoming at the time. Training activity provided by Ipas, the lead supplier of MVA equipment in Ghana, essentially ceased in 2001 with the imposition of the Mexico City Policy/Global Gag Rule. Other than free equipment obtained from trainings, MVA was available from limited private retailers in urban areas who imported equipment from outside of the country.

Barriers to MVA availability in Ghana are experienced on both the supply and demand side. From the supply side, private sector concerns about MVA distribution include: low-volume sales and poor profit margins; limited sources and models of available MVA; and a Government procurement law

which requires administrative approval for commodity purchases at the facility level. Public sector concerns include: lack of a push or pull system for MVA procurement and distribution; lack of coordination between the public and private sectors; and the Multi-Donor Budget Support (MDBS), a system of sector-wide support which does not prioritize MVA equipment. In 2003 the MDBS created a central budget through which the Government of Ghana began to allocate funds based on priority and need. A certain amount of money is allocated for health through the MDBS, but priority diseases such as HIV, malaria, and tuberculosis take precedent over reproductive health.

Concerns from the demand side were similar: limited sources for MVA equipment; the same Government restriction on procurement; and lack of supply in the public sector. Additional barriers included: negative abortion stigma; high cost of equipment; lack of preferred MVA model availability; limited access to MVA trainings; and lack of priority when facility funds are limited. A decentralized MVA procurement system enables individual facilities to procure equipment with internally generated funds (IGFs), but this is not common because of the aforementioned barriers.

Although many of the same barriers to MVA supply were described among interview participants, it was widely acknowledged that lack of equipment impacts the lower-level, low volume providers, especially nurse midwives. As a consequence, women suffer from less

than optimal treatment for uterine evacuation procedures.

MVA services ranged from 30 to 180 per month in public regional and district level facilities, between 5 to 90 per month in private hospitals and clinics, and between zero to 25 per month in private maternity homes. MVA services are reportedly free when it is an emergency and the woman cannot afford the cost, but otherwise prices ranged between \$11-33 USD (100,000-300,000 old Ghana cedis) in public regional/district level facilities, between \$54-163 USD (500,000-1.5 million old Ghana cedis) in private hospitals and clinics, and between \$3 to \$27 USD (30,000-250,000 old Ghana cedis) in the private maternity homes. In addition to charging less than physicians for MVA services, nurse midwives reported lower profit margins and less sustainable access to MVA supply.

The majority of nurse midwives have not provided MVA since they were trained due to lack of sources for the equipment and/or affordability. They continue to refer women to the closest district or regional hospital even though they have the skills to help them. This was particularly true for private nurse midwives in rural areas and for public nurse midwives working in lower-level public facilities who rely on the government to supply MVA equipment.

The low-volume, low-income nurse midwives were most likely to report that the cost of MVA equipment is too expensive, especially in rural areas. One private nurse midwife who manages a maternity home without electricity in a

rural area assists with approximately 11 deliveries per month and charges \$9 USD (80,000 old Ghana cedis) for each delivery; this is her main source of income. Although she is trained to provide MVA she cannot afford the equipment sold in her region, and there is no other source. Each month she must refer between 2 to 3 women who come to her in need of MVA services.

Other nurse midwives reported that even when funds are available at health facilities, there is often no source for supply in rural areas. As stated by a nurse midwife from a rural area of the Northern Region, *"It's not very easy [to obtain MVA]. I call the agent and if he is within the region I can get it, but if he's not in the region then I must wait until he comes. Or I come to Accra."*

Several public sector maternity homes were identified where nurse midwives had been trained to provide MVA, but none of these maternity homes offered MVA services, in part because they did not have the equipment. This is the situation for two public nurse midwives at a lower level facility in the Upper West Region who are forced to rely on facility authorities to procure MVA equipment, but it has never happened. They refer approximately one woman every six weeks to the closest regional hospital for MVA even though they are trained to provide the service. The closest regional hospital is three hours away. *"We don't have access to it [MVA]. We would be very happy if we had continuous access to it. It would be better because then we could do it ourselves, save time, save money."*

Barriers to MVA supply also impact the larger NGO health franchises. The Planned Parenthood Association of Ghana (PPAG) has struggled since USAID discontinued funds in 2003 because of the Mexico City Policy/Global Gag Rule. As a result, clinics were closed, staff were fired, the cost of contraceptives has increased, and a large volunteer network of family planning outreach and referral services in rural areas was terminated. Several clinic representatives reported an increase in the number of unintended pregnancy and self-induced abortion since PPAG was forced to discontinue services. The increased need for PAC services may result in renewed efforts to procure MVA at PPAG clinics, but funds are extremely limited.

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No MVA patients were interviewed for this study, but participants

commented on the challenges experienced by women when they need MVA services. Although regional and district level sector facilities reported the highest volume of MVA services, it is widely understood that women prefer private sector facilities because of increased confidentiality and better quality care. Many women seek public sector services because it is more affordable. Several providers reported that CAC is more expensive than PAC in both the public and private sector because women who know the circumstances to request a legally induced abortion tend to be more educated and wealthy, and the providers know they can charge higher fees among this population. It is also believed that poor women are more likely to induce an abortion on themselves rather than seek CAC because they know an induced abortion is more expensive.

Recommendations to Improve Sustainable MVA Supply

The findings of this study highlight the importance of establishing a low-cost and high-quality sustainable supply of MVA, especially for the low-volume, low-income providers. Research findings yielded ten recommendations for improving sustainable access to MVA equipment: (1) Disseminate information about the legality of CAC and PAC to eliminate the consequences of misinformation on MVA provision; (2) Continue collaborative efforts between the public and private sectors to expand access to MVA; (3) Facilitate the

availability of all high-quality MVA models on the market, including single-valve kits; (4) Encourage MVA competition on the market by increasing the number of high-quality MVA manufacturers and distributors; (5) Reduce the cost of MVA equipment; (6) Improve GHS monitoring and supervision of MVA; (7) Increase international donor support for MVA trainings and supply to overcome the challenges associated with limited Government and NGO resources; (8) Include more information in trainings and resources about where to purchase MVA and types of MVA equipment; (9) Increase the availability of MVA resources and donations for providers who cannot afford equipment, and include plans for sustainability; (10) Implement a revolving purchase mechanism for qualified health provider associations, such as the Ghana Registered Midwives Association (GRMA).

It is ideal to utilize existing infrastructures, such as the GRMA, to improve the distribution of MVA in Ghana. There are approximately 6000 public and private nurse midwives registered with the GRMA; an estimated one third work in the private sector. The GRMA regional managers organize monthly meetings in their respective regions, providing a solid infrastructure for the distribution of MVA and other reproductive health commodities in remote areas. A system of sustainable distribution through the GRMA, such as a revolving purchase mechanism

presented in Figure 1, could drastically improve MVA supply.

Public and private sector collaboration to increase access to MVA has improved since the Government of Ghana began to partner with the Reducing Maternal Morbidity and Mortality (R3M) Program. Established in 2006, the R3M Program is a consortium of five organizations (EngenderHealth, Ipas, Population Council, Marie Stopes International, and the Willows Foundation) whose intention is to reduce death due to unsafe abortion and to scale-up CAC including PAC and family planning. The GHS and R3M Program partnership has improved MVA availability during the pilot phase, through such approaches as increasing distribution mechanisms, providing MVA trainings and equipment, renovating clinics, organizing a sustainability workshop, and increasing awareness about MVA at all levels of the health care system. This collaborative approach holds promising results for the future of MVA sustainability in Ghana.

The benefits of empowering nurse midwives and lower level providers to offer MVA are numerous, but not effective unless these professionals are equipped to offer the service. This is especially important when expanding MVA to rural areas where women have the most limited access to services and are at the greatest risk for unsafe abortion. The PAC goals and recommendations set forth by Dr. Eunice Brookman-Amisshah and other MVA pioneers in 1996 have been hindered by

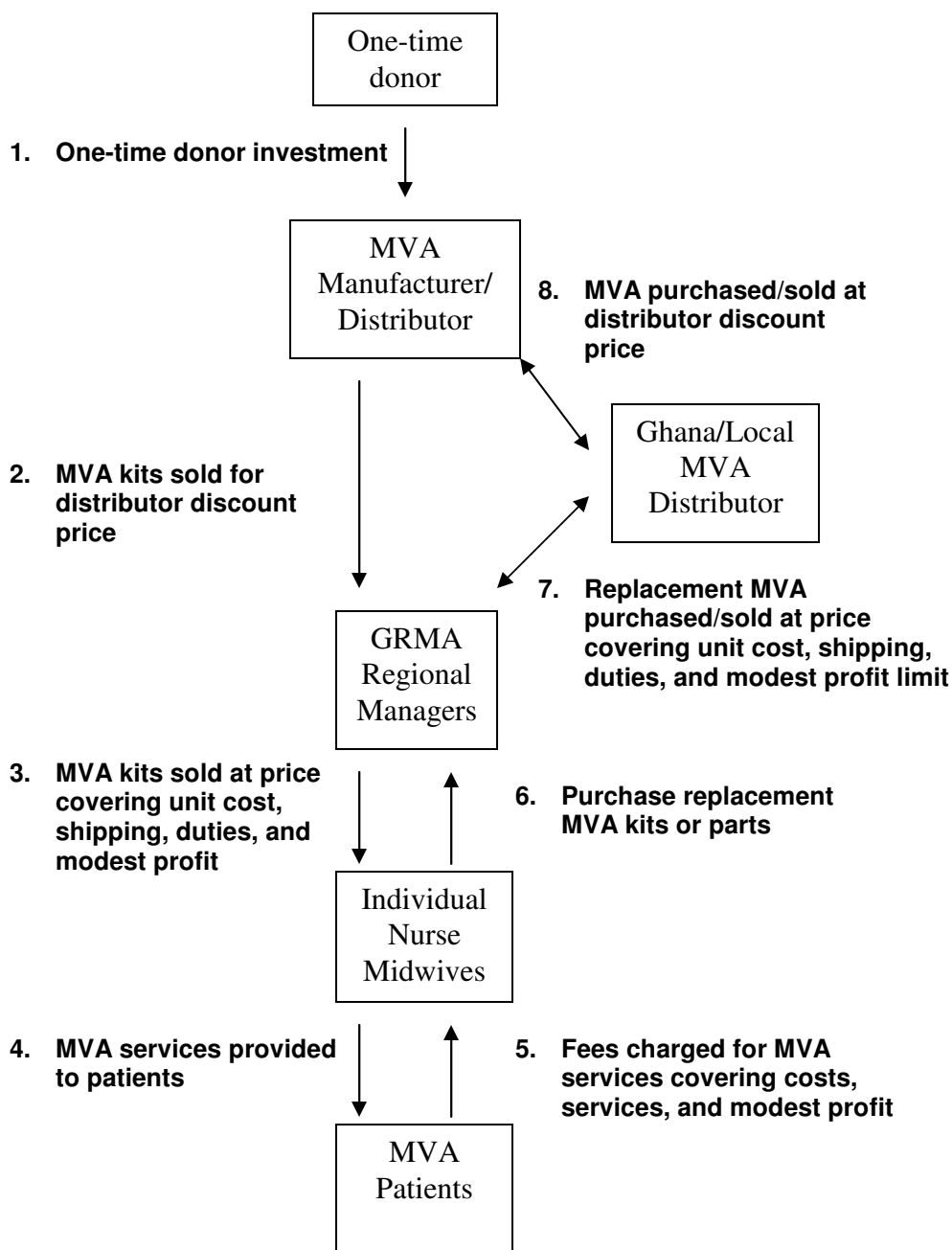


Figure 1: MVA revolving purchase mechanism for the Ghana Registered Midwives Association

barriers to MVA supply. CAC and PAC services will never be sustainable without reliable access to MVA equipment.

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