

Maama Kit

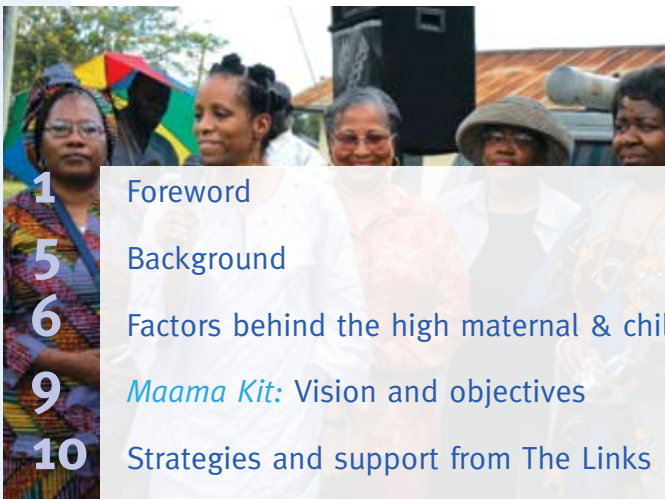
Making childbirth
clean and safer



World Health
Organization

Acronyms

ANC	–	Antenatal Clinic
DDHS	–	Director of District Health Services
DFID	–	Department for International Development
ECHO	–	European Commission Humanitarian Aid Department
HC	–	Health Centre
HSSP	–	Health Sector Strategic Plan
IDP	–	Internally Displaced Persons
IEC	–	Information, Education and Communication
IRC	–	International Rescue Committee
MoH	–	Ministry of Health
NMS	–	National Medical Stores
PMTCT	–	Prevention of Mother to Child Transmission of HIV
TBA	–	Traditional Birth Attendant
UDHS	–	Uganda Demographic and Health Survey
UNFPA	–	United Nations Population Fund
UNICEF	–	United Nations Children’s Emergency Fund
UPHOLD	–	Uganda Programme for Human and Holistic Development
URCS	–	Uganda Red Cross Society
USAID	–	United States Agency for International Development
WHO	–	World Health Organization

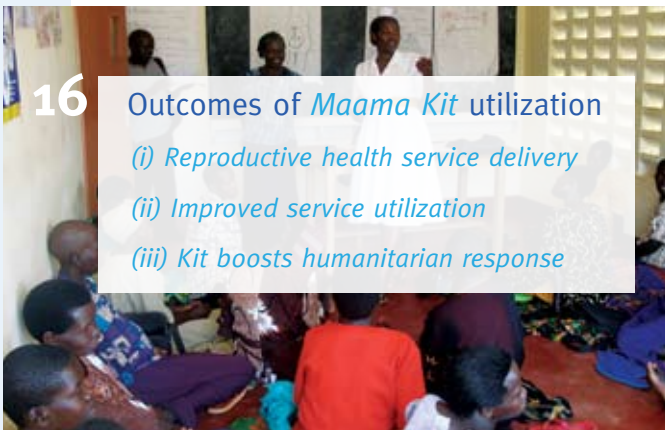


1	Foreword
5	Background
6	Factors behind the high maternal & childhood mortality
9	<i>Maama Kit</i> : Vision and objectives
10	Strategies and support from The Links Inc.

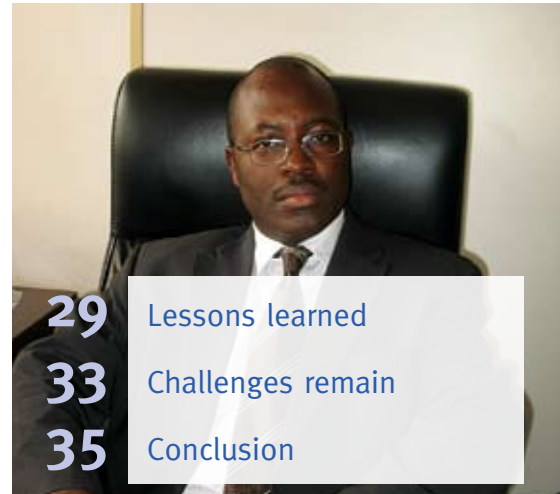
Contents



11	Move to action: Distributing the <i>Maama Kit</i>
14	Role of midwives in <i>Maama Kit</i> project



16	Outcomes of <i>Maama Kit</i> utilization
	(i) <i>Reproductive health service delivery</i>
	(ii) <i>Improved service utilization</i>
	(iii) <i>Kit boosts humanitarian response</i>



29	Lessons learned
33	Challenges remain
35	Conclusion

Message from the Ministry of Health

The Ministry of Health (MoH) acknowledges the importance of investing in the health of women and children as a way of addressing the Millennium Development Goals 4 and 5. To this end, MoH is committed to ensuring that every expectant mother gets access to the basic reproductive health services.

This commitment notwithstanding, MoH faces the challenge of delivering the above services amid acute shortages. In such circumstances, while addressing the wider scope of health problems, MoH often finds it necessary to prioritize health interventions by focusing on the essential and realistically achievable services.

Consequently, in the effort to reduce maternal mortality and morbidity, MoH devised the *Maama Kit* as an urgent and cost-effective measure to ensure that child birth is conducted in a clean environment. The *Maama Kit* consists of basic supplies that are required at child birth i.e. sterile gloves, plastic sheets, cord ligature, razor blades, tetracycline, cotton, soap and sanitary pads.

The ministry is glad to note that what started as a small initiative in a few districts has been replicated and currently the kit is accessible in over 15 districts of Uganda. In line with its commitment to make the *Maama Kit* accessible to the most vulnerable, MoH decided to provide it free of charge to expectant mothers through the National Medical Stores (NMS) and working with Health Sector Development Partners. It is also gratifying to note that the kit has supported humanitarian responses in the war-affected north and refugee camps.



I use this opportunity to remind all district planners and managers that it is now government policy to incorporate these basic supplies required at childbirth in all district and health unit budgets.

Dr. Sam Zaramba

DIRECTOR GENERAL OF HEALTH SERVICES, MOH

Message from WHO

The World Health Organization (WHO) supports low-cost technology initiatives worldwide aimed at advancing safe motherhood. In line with this mandate, WHO supported the MoH to initiate the *Maama Kit* in Uganda in 1997 as a cost-effective intervention to reduce the infections associated with childbirth. The initiative was later officially launched in Luwero district in 2003.

This booklet documents the steps and process that took place up to the time of the national launch of the *Maama Kit* and beyond. It highlights the best practice – what worked fully or in part, and useful lessons learnt in the last seven years of the use of the *Maama Kit* in Uganda.

In addition, it provides a best practice guide on clean and safe child delivery especially in low-resourced settings in Uganda. The kit initiative strikes a balance between the ideal requirements for a clean and safe childbirth, and the practical realities and gaps on the ground, especially in the rural low-resourced settings.

It is evident from the *Maama Kit* documentation that - if planned and executed well - the kit can, among other benefits, improve on the quality and utilization of reproductive health services. It is also important to note that the kit has improved on the often strained relationship between health workers and expectant mothers on one hand, and the Traditional Birth Attendants (TBAs) on the other. More expectant mothers than ever before appreciate the importance of attending Antenatal Clinics (ANCs) and giving birth at health units.



However, challenges still remain. The factors responsible for maternal mortality and morbidity are more than what the *Maama Kit* addresses. Further efforts need to be directed at sustaining the gains made by *Maama Kit* and beyond. The WHO will continue to support both national and district-based interventions of this nature.

Dr. Melville George

WHO REPRESENTATIVE, UGANDA

Maama Kit:

Making child birth
clean and safer

Background

Maama Kit, a clean and safe child delivery care kit, was launched in Uganda in 2003 with support from WHO and funding from The Links Inc. of United States of America in an effort by the MoH to reduce on illness and deaths of mothers associated with poor hygiene and unclean environment at delivery.

The initiative had started much earlier in 1997 as a joint WHO/MoH venture. Since then many partners have come to support this initiative and these include UNFPA, USAID, UNICEF, Uganda Red Cross Society (URCS), Barclays Bank, MoH, etc

This is an easily affordable delivery kit consisting of – plastic sheet, sterile gloves, razor blades, cord ligature, cotton, sanitary pads, tetracycline and soap. The initial kit had a needle and syringe but later this was removed to avoid dangerous community misuse.

The term delivery care kit is used throughout the booklet, but the whole concept of clean delivery is emphasised. It is important to note that the additional important aspects of labour and delivery are documented in other publications of both WHO and MoH. Many districts have participated to some extent in this intervention and these include Gulu, Lira, Apac, Kitgum, Pader, Soroti, Mpigi, Kampala, Hoima, Kiboga, Katakwi, Rukungiri, Kabale and Luwero but with minimal support. However MoH has now made availability of *Maama Kit* a government priority.

At the launch of the kit it was estimated that nation wide, about 60 percent of expectant mothers were being delivered at home either by TBAs or relatives. Reasons for the low utilization of health services include the perceived poor quality of antenatal and delivery services at the health facilities, and poor attitudes of health workers stemming from the lack of basic supplies at the health centres and hospitals and poor remuneration.

Quite often, mothers are required to buy the basic maternity necessities such as gloves, razor blades, cord ligature, syringe and needles, cotton wool, sanitary pads and soap. The absence of these items during delivery increases chances of sepsis or infection to all the parties involved in child delivery – mothers, newborns and midwives. In addition to this, expectant mothers in some health units were required to come for maternity with mattresses and linen.

Owing to the prevalent poverty in most communities and more especially the war affected northern Uganda and refugee communities, cost sharing in form of paying for some of the items needed for child birth poses a serious deterrent to seeking reproductive health services. Many mothers who are too poor to afford anything will simply stay away from health units when told to buy items such as gloves. Those that try to beat the odds will turn up for maternity with the bare minimum requirements, some too unhygienic to be used. It was for example common for expectant mothers to turn up for maternity services with improvised torn plastic sheets.

Factors behind the high maternal and childhood mortality



DDHS Luwero Dr. Joseph Okware displaying contents of Maama Kit at the national launch in Luwero district.

Midwives, working under acute shortages of even basic supplies are often perceived by expectant mothers as rude who in turn get discouraged to seek reproductive health services in formal health units. Consequently, the above scenarios simply promote the “try it at home” practice among expectant mothers especially when the culture that considers one “more womanly when she delivers at home” is still predominant among some communities.

The above drawbacks are compounded further by the higher illiteracy rates especially in the rural areas. In almost all districts, it is evident that more literate women seek reproductive health services than those that are illiterate. Consequently, hospitals and health centres in towns and



trading centres tend to register higher child deliveries than those in typical rural communities where literacy is lower.

Ideally TBAs can only manage normal labour and need to refer complicated cases to health centres. But despite the training, many TBAs still hold on to patients and often refer them when it is too late to save the baby, mother or both. Many deliveries by TBAs are also often conducted in very unhygienic environments. For example, the umbilical cord is often tied with dirty threads or ropes, and the bleeding mothers padded with dirty pieces of cloth.

The problems associated with TBAs notwithstanding, the lack of nearby health units, ambulances, bad roads and illiteracy makes their role inescapable and a reality to deal with by health providers. The TBAs cannot just be done away with until reproductive health services trickle down to the very remote communities.

Besides, lower health units (HC2) that interface with the community lack maternity services. Consequently, delivery outside the health care system contributes to the high national maternal mortality rate estimated at 505/100,000 live births. (2000/2001 UDHS).

TBAs attend training in Luwero district.

Maama Kit initiative: Vision and objectives

To respond to the above challenges, WHO working with the MoH, devised the *Maama Kit* with a view of making the basic requirements for childbirth accessible to all expectant mothers especially in rural areas. The overall objective of this modest initiative was to contribute on the reduction of maternal and perinatal morbidity and mortality (illness and deaths) through clean and safe delivery.

The national objectives of the *Maama Kit* initiative were:

- To provide information to women, men and communities on the importance of delivering under a clean environment.
- To provide Maama Kits to all women who deliver in health units and in the community.
- To build capacity amongst community leaders to be able to mobilize on clean and safe delivery.
- To establish a monitoring and evaluation system for implementing the *Maama Kit* initiative.





Officials from the Links Inc. at the national launch in Luwero district.

Strategies and support from The Links Inc.

To achieve the above objectives, *Maama Kit* pilot project in Luwero district relied on a four-point implementation strategy to deliver results. These were:

- Provision of support to cottage industrial production of Maama Kits
- Establishment of appropriate, affordable and sustainable production system.
- Support establishment of an affordable and sustainable logistics system.
- Provision of support for advocacy and IEC materials

In December 2003, as the implementation got underway, WHO identified and introduced the idea of the *Maama Kit* to The Links Inc., an NGO from the United States of America concerned with well being and general development of people in developing countries. The Links Inc. provided USD 100,000 to the Luwero project which started off activities.

Move to action: Distributing the *Maama Kit*



*A Ministry of Health vehicle delivers Maama Kits
at a Health Centre in Luwero district.*

The mode of kit distribution varied with the funding and participating partners involved in the initiative. Consequently, the content of the kit also varied with partners and their perception of the vulnerability of the target population. The Links Inc. funded and subsidized 100% the kits purchased and distributed in Luwero district. While some other partners such as UNICEF, USAID, UNFPA, URCS, UPHOLD, Barclays Bank have also provided support to other districts.

Initially, the plan was to cost-share the kit with patients but government opted for a free service. There were some suggestions that the kits should be given free only to the most - needy expectant mothers, and sold to others. This however posed some challenges: Firstly, it was not possible to arrive at any clear-cut criteria on how to determine the most needy countrywide. Secondly, even the most needy would still be asked to part with some payments for the kits by some devious health workers.

Given the challenges above the government decided to provide the kit free. The MoH took up the procurement and distribution of the kits to other districts and even integrated them into the essential drug distribution system. Under this system, the districts purchase the kits from the NMS and in turn supply health centres, units and some TBAs. Supply to health units and TBAs is replenished after returning the accountability-tracking sheets that indicate how the previous provisions were utilized. Distribution to TBAs is conditioned on training and response practices. This has been well documented in Luwero district where the logistics system was specifically targeted for improvement.

In addition to MoH distribution, other partners have been involved in the distribution of the kit. URCS is among the significant partners, which has been able to tap into the internal corporate community and external donors to boost the *Maama Kit* initiative. Barclays Bank, MTN, have all contributed to the URCS' internally funded kit. While the European Commission Humanitarian Aid Department (ECHO) and UK's Department for International Development (DFID) have contributed to URCS' externally funded kit.

*Sister Christine Atyam,
District Health Visitor - Lira*

The URCS teams visit camps and identify pregnant mothers, verify and sensitize them about the kit on the day of distribution. While the TBAs attend the sensitization, they don't keep the kits. The kits are given directly to the beneficiaries – the expectant mothers. During the sensitization they encourage expectant mothers to attend antenatal clinics (ANCs).

Some corporate bodies have physically got involved in distributing kits in the communities. Barclays Bank staff for example traveled to the IDP camps in Gulu and Lira to deliver the kits to the needy expectant mothers as part of the bank's corporate social investment. Barclays' total contribution to the URCS appeal was Ushs 65,000,000.

As expected, sometimes the kits are not enough to cover all would be beneficiaries. In such circumstances, the distribution criteria puts emphasis on the most vulnerable or needy – the single expectant mothers, sickly and PMTCT expectant mothers, and those about to deliver. The ANC cards are relied on to determine the most needy.

In comparison, the International Rescue Committee (IRC) has two differing distribution systems: In the IDP camps in Kitgum district, the kit is given to expectant mothers when the pregnancy is 28 weeks. On the other hand, in the more settled and established refugee camps, the kit is given out to expectant mothers on the first ANC visit.



Role of midwives in *Maama Kit* initiative

*Midwives Betty Akullu (left)
and Mariam Apiyo (right)*

Midwives as maternity managers were re-oriented to sensitize mothers at ANCs and TBAs in the communities about the kit with emphasis on its importance in having a clean and safe child delivery.

Re-oriented midwives then carried out an integrated reproductive health education (PMTCT, safe pregnancy and clean and safe child delivery) among the mothers attending ANCs and the communities. In addition, district reproductive health workers visited communities around health units and held dialogue with them on the importance of the kit and clean and safe child delivery. District reproductive health workers reported that much as community dialogues were difficult to arrange, they were more effective in making people appreciate the importance of the *Maama Kit* and the need to deliver in health units.

A midwives' re-orientation session in Luwero district.





Outcomes of *Maama Kit* utilization

DDHS Luwero district
Dr. Joseph Okware

Outcomes can be looked at two levels: (1) improved reproductive health service delivery; and (2) improved utilization of the kit and related services by expectant mothers.

Overall, all health providers and partners agree that the gains expected of *Maama Kit* initiative have largely been achieved. Demand for the kit across the districts is high – an indicator of both perceived benefit of the kit by expectant mothers, and increase in the utilization of the reproductive health services.



A mother and her newborn baby in a labour ward at Amach HC4.

(i) Reproductive health service delivery

In face of acute shortages in maternity services, midwives and health managers feel the kit has become handy while conducting deliveries. There is a general agreement that the kit has been an effective infection control tool shortly before, during and after child deliveries. As a result, rates of sepsis among mothers have in some places been eliminated or reduced drastically.

According to the DDHS Luwero, Dr Joseph Okware, in the last two years, they have not registered any child delivery related case of sepsis or tetanus, not even a referral from HCs.

Similarly, in Lira district, midwives reported that women have since the launch of the kit stopped complaining of abdominal pain after delivery at health units, an indication that infections had reduced. They also said that the tetracycline tube in the kit has also helped reduce neonatal conjunctivitis (newborn eye infection) cases. In this regard, the kit has gone a long way in ensuring clean and safe baby delivery to the benefit of all parties involved – mothers, newborns and health service providers (midwives), plus many TBAs.

Besides serving as an infection control measure, the kit has also improved the relationship between midwives and their patients. Previously the mothers perceived the midwives as rude, an aspect blamed on the latter's negative attitude stemming from an overstretched health system where service delivery falls short of patient expectations.

Betty Akullu: Happy and satisfied

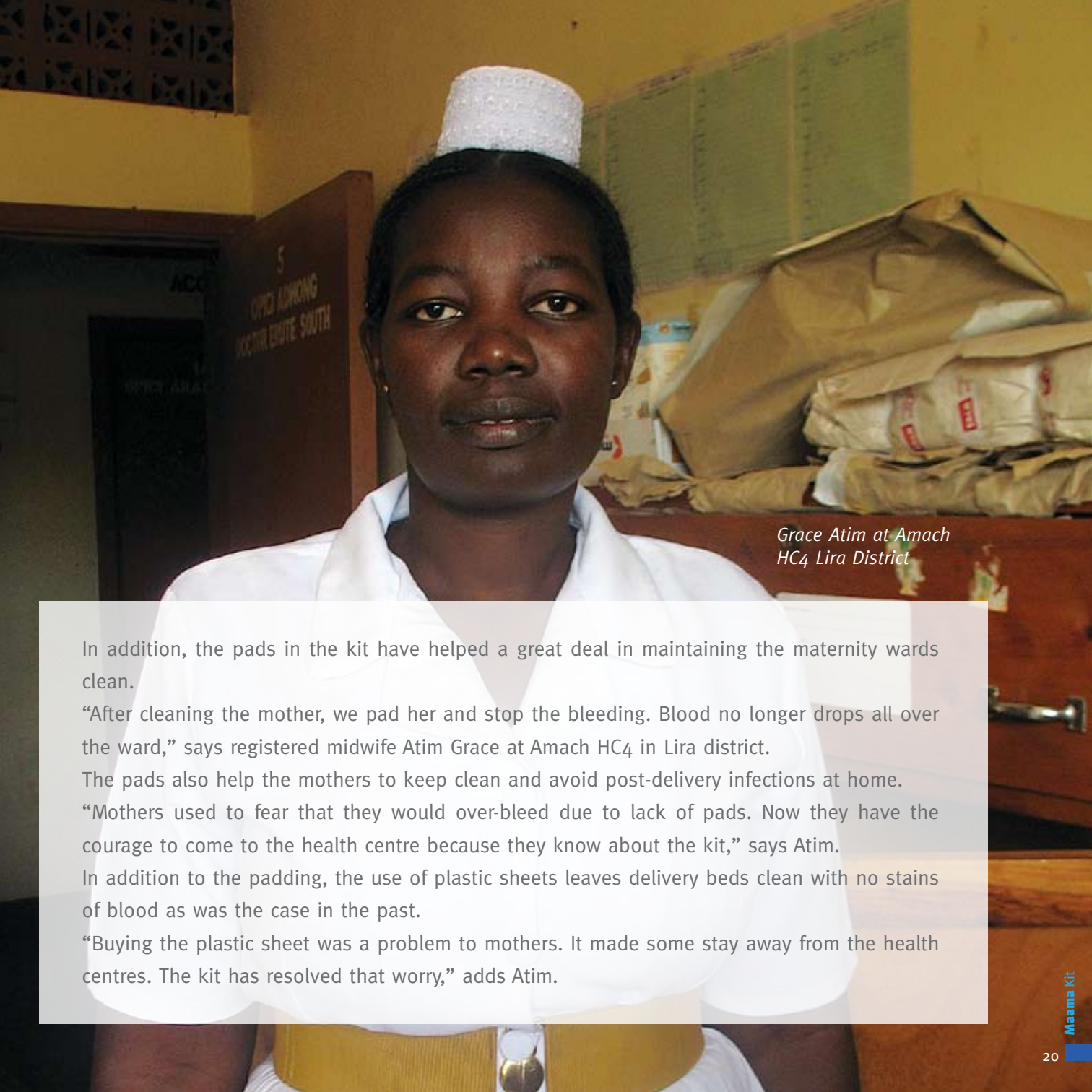


Enrolled midwife Betty Akullu is one of the only three midwives at Aleptong HC4 in Lira district serving both Alebtong and Aloi IDP camps. She says the kit helps them conduct deliveries in a healthy environment.

“Mothers here are too poor. We do not know what we would have done without Maama Kit.” She says the kit has made mothers know that the HC has good services. “They are too proud when they carry a *Maama Kit* bag when leaving the health centre,” adds another midwife Mariam Apio.

Initially, they used to give mothers the kit during ANC sessions but later changed to giving it out at labour after discovering that some mothers didn’t come back with it or came with the kit half empty or dirty. There were cases where some mothers claimed their husbands had sold it.

The two said the kit has eased their work. “After delivery, you pad her and she goes out smart,” said Apio. They said the kit has reduced complaints of abdominal pain previously caused by unclean materials used for padding.



*Grace Atim at Amach
HC4 Lira District*

In addition, the pads in the kit have helped a great deal in maintaining the maternity wards clean.

“After cleaning the mother, we pad her and stop the bleeding. Blood no longer drops all over the ward,” says registered midwife Atim Grace at Amach HC4 in Lira district.

The pads also help the mothers to keep clean and avoid post-delivery infections at home.

“Mothers used to fear that they would over-bleed due to lack of pads. Now they have the courage to come to the health centre because they know about the kit,” says Atim.

In addition to the padding, the use of plastic sheets leaves delivery beds clean with no stains of blood as was the case in the past.

“Buying the plastic sheet was a problem to mothers. It made some stay away from the health centres. The kit has resolved that worry,” adds Atim.

(ii) Improved service utilization

The outcomes of reproductive service utilization are assessed at two levels; (1) child deliveries at health units, and (2) ANC attendance. So far, there has been no case of resentment or refusal of the kit by expectant mothers.

“*Maama Kit* excites mothers. Having it one gains confidence,” Sister Atyam Christine at Lira district offices notes, adding, “in the past mothers used to be told to come with gloves and many often retorted, ‘where do I get it?’ The kit provides answers to the shortages of child delivery facilities. We only pray that supply is enough and sustainable. *Maama Kit* gives mothers a sense of ownership in service delivery.”

As a consequence, the kit has increased the appreciation of the importance of ANC services. All districts reported increase in ANC attendance since the provision of the kit started. Initially, the provision of the kit was conditioned on ANC attendance as an incentive to increase service utilization. Although this proved impractical and was abandoned along the way, the promise of a free kit has lured mothers to attend ANCs and also deliver at the health units. Previously the fear of lack or user cost of kit items made some mothers stay away from ANCs and maternity services.

Similarly, a number of health centres reported increases in child deliveries since the distribution of the kit started. For example, Amach HC4 registered 39 deliveries in November 2006 compared to a monthly average of only 10 before the kit was launched.

According to Sister Grace Were, Principle Nursing Officer and Reproductive Health Trainer, at the MoH, the kit has attracted mothers to deliver at HCs. “Districts with 15% delivery coverage have increased their institutional deliveries as a result of the kit service.”



Grace Atim talks to expectant mothers at Amach HC4 ANC.

Janet Apili: Happy with health workers



Janet Apili, 26, sits in Amach HC4 maternity ward on 13 December 2006 a day after delivering her fourth child, the second at a health centre. She says it is good to deliver at a hospital because she is given free items for the baby and her self.

Janet says the TBAs often lack the essential facilities to ensure clean and safe deliveries. She says the two times she delivered outside hospital, the TBA handled her without gloves. Asked what she would tell expectant mothers, Janet said: “Whenever you experience labour, rush to the hospital please.”

Although her husband who is a teacher thinks they should stop at the four children, she insists on having a fifth one because the three are boys and her only daughter needs a sister.

Grace Atim explains the Maama Kit contents to a mother after delivery.



In addition to the increase in seeking ANC and maternity services, the kit has also increased the opportunities for midwives to interact and come closer to some TBAs and share knowledge. In a few instances, the HCs have been able to bring TBAs into their control and monitoring.



Luwero District Health Visitor Ruth Achan and Ruth Namwanje from Nsimbwa HC4 visit TBA Sayama Shaban in Bombo.


Maama Kit protects Siyama Shaban from HIV infection

Siyama Shaban is a TBA in the community served by Nyimbwa HC4 in Bombo, Luwero district.

She says she has been delivering babies since 1972. She has a book with records of mothers delivered as far as 1992 when the HC4 started to train her. After deliveries, she refers the babies to Nyimbwa HC for immunization. Her records indicate that she on average delivers five babies a month. Her positive response to training has won her the trust of the HC staff. Because of her response to training, co-operation with the HC, and sound accountability for the kits among other things, she is the only TBA in the community supplied with the kits.

Siyama is full of praises for the kit. “It helps me not get HIV infection and also keep the place clean. The patients are happy.” She says when short of kits, she buys the gloves and the mothers meet the costs.





Sr. Lazar Scuva Mary, head of St. Luke HC3, Bombo, Luwero district.

The zero-price factor (free) has enhanced the kit appreciation rate. People are often too poor and quickly respond to services when no spending is involved.

Sr. Lazar Scuva Mary is the head of St Luke HC3 in Bombo. She says maternity services in Uganda needs a lot of support.

“We are happy to receive the kit here. In our area people are poor. They cannot afford to pay for delivery. Once we get them, they (mothers) come in big numbers.”

(iii) Kit enhances humanitarian response

The initial outcome of the *Maama Kit* has inspired other partners to help poor and vulnerable communities replicate the initiative. One such notable example is the *Maama Bag* initiative spear-headed by URCS in northern Uganda where access to health services has been affected by war and displacement of communities. The initiative is part of URCS' humanitarian responses to help mitigate the suffering of vulnerable people. The URCS, while responding to the crisis of the IDPs in Gulu and Lira districts, came up with the *Warm Bag* for children aged between 6 months and eight years. The bag included blankets, soap, linen, and basin. Other partners enriched the bag by adding milk, juice and maize flour.

But realizing the effectiveness of tapping the corporate world, URCS came up with yet another bag – *Maama Bag* specific to expectant mothers. Their assessment found that owing to the collapse of the health services and general infrastructure, expectant mothers were more at risk during childbirth. Because of lack of access to health services, mothers were dying during child deliveries. The survivors were wrapping newborns in their own clothes and rags. Even where TBAs were trained, because of the lack of items like soap, they could not offer clean and safe deliveries. The contents of *Maama Bag* varied with the funding institutions. The internally funded standard kit had the same items found in *Maama Kit*. Barclays Bank, MTN and Uganda Golf Club generously contributed to this bag.

On the other hand, the externally funded bag has additional items such as baby panties, nappies, baby sheets, safety pins, and two pullovers, three bars of washing soap, baby lotion, powder and a large mosquito net for both the mother and newborn. Both ECHO and DFID funded the en-richened bag.

Another notable example of the kit as part of an effective humanitarian response is the support by the IRC. The kit is part of their humanitarian response tools in Kafe (Yumbe district) and Kiryandongo (Masindi district) refugee settlements. The IRC is appreciative of the kit as an incentive to mothers to utilize reproductive health services.

Lessons learned

The initial plan was to use the kit as an incentive to mothers to attend the ANC by giving it only to those that attend at least four times. However this approach proved impractical and was abandoned. Much as it encouraged mothers to attend ANC, often the kit is the only facility available to ensure clean and safe child delivery both to the mother, newborn and the midwives. The initial plan would mean chasing away mothers in labour or handle them in a risky environment without protection.

Similarly, except for the districts where the URCS operates, the initial plan to give out the kit to expectant mothers during ANC with directives to bring it along when coming to deliver was also abandoned in some districts. Much as this creates a sense of ownership, giving out the kit at ANCs had its own shortcomings.

More than often, the expectant mothers' dwellings are far from guaranteeing cleanliness and safety to the kit. Mothers sometimes turn up with dirty and tampered kits, or with some contents missing. Because of the small space at homes such as the IDP camps, children often play with the kit and tamper with the contents. There were also cases of husbands selling off the kit or putting to other use some of the items in the kit.

Consequently, all districts decided to give the kit to mothers when they are in labour. However, the mothers would continue to be introduced to the kit during ANCs and assured of its availability to them when they come to deliver at the health units.

Packaging also matters a lot the way the kit is appreciated. Many mothers and midwives feel the bag kit is better than the one simply wrapped in a plastic sheet. Mothers feel proud when they leave the hospital holding the kit bag.

Midwives also feel that having IEC materials such as a poster portraying *Maama Kit* would be a good visual aid during sensitization of expectant mothers and communities. Only a few districts got this poster because of limited quantities received from WHO. To supplement reproductive health education among communities, advocacy of the kit need to be stepped up by involving local leaders. Local leaders have a vital role in promoting new health products and services in their communities. In many districts, local leaders were initially not involved in promoting the kit service. Efforts to involve them are underway.





*Midwife Betty Takuwa preparing a delivery bed
at Luwero HC4*

Challenges remain

Like any other health initiative, *Maama Kit* has had some challenges to learn from in addition to the successes seen above. The midwives' major fear has been sustainability of supply. Supply of the kit is sometimes intermittent and HCs often run short of stock, threatening the gains made so far.

In addition to sustainability, both midwives and beneficiaries continue to raise issues with the size of the kit. Some mothers feel the plastic sheeting is too small and should be increased in size. While the midwives feel the numbers of pairs of surgical gloves in the kit should be increased to at least three (There are currently 2 pairs of surgical gloves and 1 clean pair of gloves). When handling PMTCT cases, midwives feel safer wearing two gloves on each hand.



DDHS Lira Dr. Peter Kusolo.

The TBAs do not easily embrace reporting and accountability systems. Whereas they are supposed to be attached to HCs in the communities, it is not easy to monitor them all. That aside, the kits are not enough to cover all the TBAs. However, several TBAs have received delivery kits and they are happy with them.

Conclusion

The factors contributing to maternal mortality are many and include late referrals by TBAs delays at the household level, distant health centres, lack of equipped labour wards and theatres, poor infrastructure such as poor roads and lack of ambulances among others. *Maama Kit* addresses only part of the problem. The point though is that however small the area covered by the kit; it makes a major contribution by ensuring that mothers deliver children in a clean and safe environment.

To this end, it is gratifying to note that the MoH, in an effort to consolidate the gains from *Maama Kit*, have decided to incorporate it under the Essential Medicine List elaborated in the Health Sector Strategic Plan II.

According to Dr. Anthony Mbonye, the Assistant Commissioner for Reproductive Health, under this programme every expectant mother should be able to access *Maama Kit* nation-wide through the health units. Districts will now purchase the kit directly through the new credit line for medicines. While this is a very commendable plan, the sustainability of the kit will largely depend on availability of funds



*Dr. Anthony Mbonye,
Assistant Commissioner Reproductive Health, MoH.*



WHO publication