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IMPROVING ACCESS TO SKILLED ATTENDANCE AT DELIVERY: A POLICY BRIEF FOR UGANDA

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Objective: This study describes the process of production, findings for a policy brief on Increasing Access to Skilled Birth Attendance, and subsequent use of the report by policy makers and others from the health sector in Uganda.
Methods: The methods used to prepare the policy brief use the SUPPORT Tools for evidence-informed health policy making. The problem that this evidence brief addresses was identified through an explicit priority setting process involving policy makers and other stakeholders, further clarification with key informant interviews of relevant policy makers, and review of relevant documents. A working group of national stakeholder representatives and external reviewers commented on and contributed to successive drafts of the report. Research describing the problem, policy options, and implementation considerations was identified by reviewing government documents, routinely collected data, electronic literature searches, contact with key informants, and reviewing the reference lists of relevant documents that were retrieved.
Results: The proportion of pregnant women delivering from public and private non-profit facilities was low at 34 percent in 2008/09. The three policy options discussed in the report could be adopted independently or complementary to the other to increase access to skilled care. The Ministry of Health in deliberating to provide intrapartum care at first level health facilities from the second level of care, requested for research evidence to support these decisions. Maternal waiting shelters and working with the private-for-profit sector to facilitate deliveries in health facilities are promising complementary interventions that have been piloted in both the public and private health sector. A combination of strategies is needed to effectively implement the proposed options as discussed further in this article.
Conclusions: The policy brief report was used as a background document for two stakeholder dialogue meetings involving members of parliament, policy makers, health managers, researchers, civil society, professional organizations, and the media.

Keywords: Skilled, Attendance, Maternal, Uganda, Delivery

This study describes the process of production, findings for a policy brief on "Increasing Access to Skilled Birth Attendance" and subsequent use of the report by policy makers and others from the health sector in Uganda. The methods used to prepare the policy brief use the SUPPORT Tools for evidence-informed health policy making (1–3). The policy brief assesses a health systems problem, potential policy options to address the problem, and strategies for implementing those options. The report brings together global and local research evidence from systematic reviews or single studies to inform deliberations about increasing access to skilled birth care. The report was used as a background document for meetings (policy dialogues) among policy makers and other stakeholders, either engaged in developing policies for increasing access to skilled birth attendance, or likely to be affected by these policies. Increasing access to skilled care at birth has significant potential to address maternal mortality and morbidity through the use of facility-led interventions such as: provision of intrapartum care at first or primary level health facilities, working with the private-for-profit (PFP) sector and use of maternity waiting homes (MWHs).

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METHODS

The problem that this evidence brief addresses was identified through an explicit priority setting process involving policy makers and other stakeholders, further clarification with key

informant interviews of relevant policy makers, review of relevant documents, discussion with a working group of stakeholder representatives, and external review of a preliminary description of the problem. Research describing the size and causes of the problem was identified by reviewing government documents, routinely collected data, electronic literature searches, contact with key informants, and reviewing the reference lists of relevant documents that were retrieved.

Strategies used to identify potential options to address the problem included considering interventions described in systematic reviews and other relevant documents, considering ways in which other jurisdictions have addressed the problem, consulting key informants, and brainstorming. Potential barriers to implementing the policy options were identified through brainstorming using a detailed checklist of potential barriers to implementing health policies (4).

We searched electronic databases using index terms or free text in PubMed, Health Systems Evidence, Cochrane Library, Campbell Collaboration, DARE, HTA databases, SUPPORT evidence summaries, HINARI for full text articles of citations identified. Gray literature sources searched included; the AFRO health workforce observatory, OpenSIGLE, WHOLIS, Google Scholar, national reports, and government documents.

We supplemented these searches by checking reference lists of identified studies and communication with authors to find other relevant published or unpublished studies. The final selection of reviews for inclusion was based on consensus by the authors.

One of the authors summaries included reviews using an approach developed by the Supporting the Use of Research Evidence (SURE) in African Health Systems project (5).

Drafts of each section of the report were discussed with the working group of stakeholder representatives. The external review process of a draft version was managed by the authors.

RESULTS

The Problem

Target 5.A of the Millenium Development Goals aims to reduce the maternal mortality ratio by 75 percent between 1990 and 2015, through monitoring two indicators: the proportion of births attended by skilled personnel and the maternal mortality ratio (6).

Uganda's maternal mortality has moderately declined from 670 per 100,000 live births in 1990 to 430 per 100,000 live births in 2008 (7). This translates into an annual decline of 13 maternal deaths per 100,000 live births compared with the 20 maternal deaths per 100,000 live births, which is the annual decline required to meet the MDG target deadline.

Skilled attendance in Uganda stood at 42 percent in 2006 (8) and increased to 50 percent by 2008 (9). The current Ministry of Health policy provides for a midwife at first level health facilities, which at present serves a population of 9,212; this estimate includes both public and private units (the ideal standard is one first level health facility for a population of 5,000) (10). The midwife can only perform antenatal care services but not deliveries and has to refer expectant mothers to the second level health facility to be attended by a senior midwife and a clinical officer (10;11).

ICM and FIGO proposed a target for developing countries to have at least one person with midwifery skills for a 5,000 population, attending approximately 200 births per year (12).

Size of the Problem. Maternal and perinatal causes constitute 13.2 percent of the total disease burden in the country (13). Maternal causes account for a total of 515,000 disability-adjusted life-years (DALYs), while perinatal causes account for 1,345,000 DALYs out of a total of 14,146,000 DALYs for Uganda (13). Maternal causes include obstructed labor, eclampsia, puerperal sepsis, and obstetric hemorrhage among others, while perinatal causes include prematurity, low birth weight, birth asphyxia, birth trauma, neonatal infections, and other neonatal conditions. The primary involvement of a skilled attendant from the onset of labor up to 48 hours after delivery is needed to prevent, appropriately manage, and/or refer the major causes of maternal mortality.

Cause of the Problem. Several factors hinder expectant mothers from accessing care at health facilities where skilled attendance is available for their care. Adequate facilities and sufficient numbers of skilled health workers are needed to achieve the desired maternal and child health indicators. There is maldistribution of the health workforce, with more workers preferring to work in urban areas versus rural areas, private sector rather than public sector, because of higher compensation. In addition, several determinants influence delivery service use from the mothers' perspective, including sociocultural factors, perceived need for care, and economic and physical accessibility (14–18). Overall, mothers value high quality of care relative to other factors such as cost and distance.

Policy Options

The three policy options presented in this section could be adopted independently or complementary to the other to increase access to skilled birth care.

The Ministry of Health is deliberating operationalizing first level facilities for deliveries and requested for evidence to support these decisions. Maternal waiting shelters and working with the private-for-profit sector to facilitate deliveries in health facilities are promising complementary interventions that have been initiated in both the public and private health sector.

Policy Option 1. Providing intrapartum care at first level health center: Intrapartum care refers to the provision of delivery services and immediate postpartum care for mothers and their newborn babies. Most maternal deaths occur during labor, delivery and 48 hours postpartum (19). Many complications cannot be predicted or prevented and require timely diagnosis and

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appropriate management by skilled attendants to prevent death or morbidity. This raises the need for routine delivery by mothers in an adequately functioning health facility providing basic Emergency Obstetric Care (EmOC), with referral access for comprehensive EmOC at higher level facilities.

Current facility-based provision of intrapartum care: The basic package of services puts deliveries under sub-county administration at second level health centers, which have an average distance of 20 km from the household (20). 93.5 percent of pregnant women receive antenatal care from midwives posted at first level health centers (average distance of 5 km), who are not authorized to provide intrapartum care at this level. As a result, only 42.1 percent of women deliver in health facilities (8).

Impact of intrapartum care at first level health center: Country case studies from developing countries which achieved significant declines in maternal mortality over the past few decades were considered in terms of where the women gave birth (in a facility or at home) and who conducted the deliveries (a professional or lay attendant, for example, community health workers) (21). Four models of care were compared in transitional middle income countries, such as Sri Lanka, Malaysia, China, Brazil, Mexico, and in high income settings, for example the United Kingdom and United States of America. Successful models made use of well-trained midwives, with access to drugs for basic EmOC, protocols for identifying problem pregnancies and deliveries, and means of referral to a comprehensive EmOC center, such as a hospital. The most feasible model for the Ugandan context is the one that places midwives at first level health centers.

Policy Option 2. *Working with the Private-for-Profit (PFP) Sector to Provide Intrapartum Care at First Level Health Center:* The private sector includes formally or informally-trained health providers who may be PFP or private not-for-profit (PNFP). The PFP providers control 40 percent of first level centers, nearly three times that of the PNFP sector for this level of care (14 percent); therefore, it is being targeted for increasing access to professional care at delivery for expectant mothers (10).

Impact of Working with the PFP Sector for Healthcare Delivery: A systematic review on working with the private sector to improve usage of quality health services by the poor identified fifty-two studies from low and middle-income countries (22). The review found low quality evidence suggesting that many interventions involving the PFP sector can be implemented successfully in poor communities. Positive equity impacts can be inferred from interventions involving providers who are predominantly used by poor people. However, stronger evidence on the equity impacts of this type of interventions is needed for more robust conclusions to be drawn. The identified interventions for working with the PFP sector include:

Provision of vouchers: A voucher is a form of demand-side subsidy that the recipient can use as part or full-payment for a product or service from identified providers. The distribution of vouchers can be targeted to improve access for an identified population group such as the poorest households or pregnant women.

Contracting-out: Contracting-out is a purchasing mechanism used to acquire specified services of a defined quality at an agreed price from a specific PFP provider and for a specific period of time. Governments may purchase clinical or non-clinical services from PFP providers to complement public provision.

Franchising: Franchising refers to a contractual arrangement between a health service provider and a franchise organization, which aims to improve access to quality-controlled and price-controlled services.

Training: Training interventions can take various forms, including formal training sessions, vendor-to-vendor education, and distribution of guidelines and job-aids. Training is often integrated into other interventions, such as franchising, accreditation and social marketing.

Policy Option 3. *Maternity Waiting Homes*: A maternity waiting home (MWH) is a residential facility within easy reach of a hospital or health center which provides EmOC. MWHs aim to improve physical access to EmOC for women in labor in remote areas. Challenges of using these facilities include: costs of stay, lack of privacy and lack of respect from health workers (23).

Impact of maternity waiting homes: A systematic review describing studies on the effectiveness of MWHs found potential benefits of MWHs on outcomes for women and their newborns, but with low usage levels due to access barriers (24). MWHs may be a relevant option in rural populations with limited access to EmOC. However, there is insufficient evidence to determine the effectiveness of MWHs in low resource settings and high quality studies in this field are still needed.

Implementation Considerations

Key barriers to implementing the policy options and implementation strategies to address these are summarized below:

Barrier to Implementation. *Knowledge and care seeking behavior of expectant mothers*: Socio-cultural factors and negative perceptions are factors associated with low usage of healthcare services by mothers (8;25). Societal and familial expectations often influence women's choices to seek care and may lead to delays in seeking essential professional care. The community has inadequate information on birth preparedness and emergency readiness, danger signs of pregnancy, delivery, and after child birth, as well as risks and danger signs in newborns.

Strategies for Implementation. *Village health teams (VHT)* and scale-up of the Community Integrated Management of Childhood Illness (IMCI) strategy could be used to provide accurate health information, to mobilize mothers for health action (checks for danger signs of pregnancies), to provide linkages to MWHs/or to refer each mother for appropriate use of health services (26).

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Community mobilization programs could increase community demand for obstetric care. There is moderate evidence that community mobilization programs can reduce early neonatal and perinatal mortality and increase skilled birth attendance (27).

Barrier to Implementation. *Expectant Mothers' Social and Economic Constraints*: Economic constraints are associated with low usage of healthcare services by mothers (8;25). Life-saving practices are not always followed due to poverty, cultural beliefs, lack of household food security and poor access to health care.

Social responsibilities, such as need for women to provide for their families and care for young children, sometimes stand in the way of using needed services, including refusing hospital admission when complications requiring admissions are detected during antenatal visits.

Strategies for Implementation. *Maternity waiting homes* (MWH) facilities, where women can stay at the end of their pregnancy with arrangements to be assisted by skilled birth attendants once labor starts, could be established.

Community referral and transport schemes that are used vary widely may include paying for travel costs, establishing a transportation plan, and providing various means of transport, including loan for a truck or ambulance transport using bicycles, motorcycles, vehicles. Enhanced communication between community-based health workers and medical professionals, as well as primary and referral level facilities, are key factors in accessing services.

Financial subsidies and increasing service demand: There is no evidence that subsidies would attract more pregnant women to use MWHs. However, high costs are a deterrent to MWH usage (23). Increasing community demand for obstetric care could prove useful (27).

Barrier to Implementation. *Knowledge, competency, and attitudes of health workers:* Lack of supervision of health workers in charge of MWHs and staff attitudes during antenatal care (ANC) and delivery are among the key determinants of the levels of usage of the waiting shelters (23).

Strategies for Implementation. *Educational meetings and training*, for example, training workshops, educational outreach, support supervision by a higher health cadre in MWHs, and feedback (a summary of performance over a specified period of time given in a written or verbal format) can be used alone or in combination with each other and other interventions to improve health.

Barrier to Implementation. *Inadequate financial resources*: Inadequate investment for basic infrastructure of public facilities, medicines, equipment and supplies has impacted negatively on service quality. Private expenditure on health is as high as 81 percent of the total health expenditure. The national health insurance scheme has yet to be implemented (10).

Strategies for Implementation. *Financial strategies* to increase community demand for obstetric care include elimination of user fees, community based insurance schemes, community loan funds, conditional cash transfers, voucher schemes, contracting out and pay for performance. There is need for increased public investment in staff, supplies, and infrastructure.

Barrier to Implementation. *Inadequate human resources*: The availability, access, and quality of health services are affected by insufficient numbers of trained staff and uneven distribution of available skilled personnel.

Strategies for Implementation. *Optimizing health worker roles* could improve the delivery of maternal and child health care.

Barrier to Implementation. *Inadequate facilities*: Lower grade facilities provide limited care services despite being closer to the rural communities, where maternal and child mortality risks are highest. There is imbalance in the distribution of health facilities between rural and urban regions, particularly for higher level centers which provide delivery services. Long distances and poor drug availability are among the most significant factors affecting access to health care (8;25).

Strategies for Implementation. *Strengthening the public and private health infrastructure* could provide a continuum of care to mothers and newborn babies. There is moderate evidence on securing limited space or restructuring existing public and private health facilities to accommodate MWHs for EmOC.

Barrier to Implementation. *Public-private healthcare partnership*: Partnership between public and PFP sectors in delivery of health care to achieve public goals is limited.

Strategies for Implementation. *Strengthening Public-Private Collaboration* may be useful in delivering health services on behalf of the public sector. The schemes that are used vary and may include social marketing, use of vouchers, pre-packaging of drugs, franchising, training, regulation, subsidies, accreditation, and contracting-out (22). Effective public private partnerships can increase access, improve equity, and raise quality of service.

CONCLUSIONS

This policy brief was discussed as a background document for two policy dialogue meetings in Kampala. Participants included people with relevant expertise and perspectives including: members of parliament, policy makers, health managers, researchers, civil society, professional organizations, and the media. The purpose of these dialogues was to conduct a structured discussion of the policy brief on increasing access to skilled birth attendance at delivery. These deliberations among health policy makers and other stakeholders can potentially contribute to evidence-informed health policies by adding value to the policy brief through clarification and development of a shared understanding of the problem and its possible solutions.

There was strong agreement among the dialogue participants about the need to increase skilled attendants at birth and contribute to the reduction of maternal morbidity and mortality

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in the country. Stakeholders identified health system constraints such as: inadequate resources, corruption, poor leadership in the health sector, poor procurement systems, poor health infrastructure, low numbers of midwives and other health workers. Proposed solutions included: adoption of the three policy options, special consideration for mothers with disabilities, use of VHTs, supply and demand-side incentives, regulatory framework for the private sector, recognition of traditional birth attendants and the supportive role of fathers and male partners.

The stakeholders evaluated both the policy brief and dialogues as highly useful mechanisms to communicate research evidence for decision making. Next steps include tracking of the policy brief and the information produced by the dialogues through the policy development process led by the Ministry of Health.

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CONFLICTS OF INTEREST

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