ABSTRACT

The 5th Millennium Development Goal (MDG) intends to reduce the maternal mortality ratio (MMR) by 75% by 2015. Having childbirth managed by providers with midwifery skills is the most important intervention for promoting safe motherhood. In Uganda, reportedly 40% of deliveries are managed by skilled birth attendants. Structured interviews were conducted with 431 women who had given birth between July 2007 and June 2008, in Mukono district in Ghana. They were questioned about their preferred childbirth sites, and about factors influencing their choices. Identified childbirth sites included homes, traditional birth attendants (TBAs), private and public clinics. Reportedly 72% of these women used the services of skilled birth attendants. The choice of childbirth site depended on the pregnant woman but was influenced by health workers’ attitudes, the locations of the sites, the antenatal clinic sites, the availability of supplies and drugs, and the availability of emergency obstetric care.

KEYWORDS: childbirth site, maternal mortality rate, midwifery in Uganda, safe motherhood, skilled birth attendants

INTRODUCTION

According to the United Nations Children’s Fund (UNICEF), a woman dies from childbirth complications every minute – about 529 000 each year. A woman in sub-Saharan Africa (SSA) has a 1:16 chance of dying in pregnancy or childbirth, compared to a 1:4 000 risk in a developed country (UNICEF, 2003:6). During September 2001, 147 heads of state collectively endorsed the Millennium Development Goals (MDGS). Goal 5 intends to reduce the maternal mortality ratio (MMR) by 75% by 2015 (UNICEF, 2006:3).
Safe motherhood depends on the availability of a trained provider with midwifery skills at every birth, transport for referral services and quality emergency obstetric care (UNICEF, 2006:3). To track changes in maternal mortality levels, the proportion of births attended to by skilled health personnel is one of the indicators to monitor progress towards achievement of the 5th MDG.

Since 1988, Uganda’s MMR has stagnated at around 500 deaths per 100 000 live births (MOH, 2005:5). Although Uganda endorsed the MDGs in 2001 and aimed to reduce the MMR by 2010, this has not been achieved due to the low number of births managed by skilled birth attendants.

BACKGROUND INFORMATION

In 1978, the World Health Organization (WHO) member countries formally adopted the Alma-Ata Declaration. The Primary Health Care (PHC) strategy was the model to be used to achieve “Health for all by 2000”. One of the components of the PHC focused on maternal health care. The desired goals of this component included providing skilled healthcare during pregnancy and childbirth. “Health for all by 2000” was not achieved due to economic changes causing health sector reforms recommended by the World Bank in 1993 (Hall & Taylor 2003:17). According to the WHO (2000:13), inadequate funding, insufficient training of health workers and inadequate equipment at all levels of health care delivery, contributed to the failure to accomplish these goals.

During 2001, at the United Nations Millennium Summit, 189 United Nations (UN) member states adopted eight interlinked MDGs. The 5th MDG focuses on improving maternal health, with the objective of reducing the MMR by 75% by 2015 (UNICEF, 2006). In order to monitor progress towards the achievement of this goal, the MMR (the number of pregnancy-related deaths per 100 000 live births) as the outcome indicator, and the number of births managed by skilled personnel as the process indicator, were assessed (WHO, 2004a).

MMR statistics show great disparities between developing and developed countries. The difference between countries that managed to lower their MMR and those that did not depended on the way in which skilled care was organised (Luc, Della, Carla & Wim, 2003:39). Malaysia, with a tradition of professional midwifery since 1923, reduced its MMR from over 500 in the early 1950s to 250 per 100 000 births in 1960. Thailand’s MMR exceeded 400 per 100 000 births in the 1960s, but after substituting traditional birth attendants (TBAs) with certified village midwives, the country’s MMR declined to 200–250 within ten years (WHO Report, 2004b:66).

Women normally turn to TBAs because other health workers are unavailable or are too expensive, or because TBAs understand the women’s culture and respect their needs.
Nevertheless, even trained TBAs often cannot save women’s lives because they are unable to detect or treat complications and/or refer women effectively (Carlough & McCall, 2005:200; Luc et al., 2003:45).

Zoë (2007:1) contends that 2007 marked the 20th anniversary of the Safe Motherhood Movement. However, only half of the world’s women have access to skilled professional care during childbirth. It would require more than 700 000 midwives to provide universal access to skilled midwifery care (Thoraya, 2007:11; Kanti & Koblinsky, 2007:5). Weak governance and ineffective government-donor relationships cause barriers to the scaling up of services to achieve universal coverage of maternal health care in developing countries, even with external aid (Fogstad, 2007:3).

Earlier studies identified distance to a maternity unit as a factor that influenced pregnant women’s choice of delivery site (Amooti & Nuwaha, 2000:203). Standard of living and level of education influenced women’s selection of childbirth site (Luc et al., 2003:43; Negussie & Obare 2004:90; Pallikadavath, Foss & Stones, 2004:1147). In India, Zoë (2005:385) discovered that women sought care in response to anticipated serious morbidities. Payment for health care was a hindering factor for the poor to seek health care (Falkinghan 2007:4). In Ghana, Witter (2007:3) observed that removal of childbirth fees increased demands for public health services and TBAs reported declining client numbers.

In Nigeria, the reputation of health care providers and the quality of state health services, influenced women to use these services (Alastair & Pepper, 2005:76). The improvement of staff-patient communication and making services more patient-oriented also promoted women’s health seeking behaviours in Cape Town, South Africa (Abrahams, 2001:240). An effective skilled health worker needs appropriate education, skills, environment, political support, communication systems and transport (Maimbolwa, 2003:263).

Mukono district in Uganda has five hospitals and four health centres with operating theatres that can handle obstetric emergencies. There are also 24 health centres offering maternity services (Mukono District Council, 2005a:24). The literacy rate is 58% but lower among the female population (Mukono District Council, 2003:7). The Population and Housing Census of 2002 estimated the district population at 795 393. The projected population for 2007/2008 was 867 300. At a district pregnancy rate of 5.2, at least 45 000 women were expected to be pregnant during this period. According to the Ministry of Health (MOH), the district’s staffing level was at 78.3% (Mukono District Council, 2005b:13). Despite improved infrastructure and staffing levels, institutional deliveries by skilled health workers prevailed at 40% although 93% of these women had attended an antenatal clinic (ANC) at least once during their pregnancies (MOH, 2005a:9).
Since 2000, several health sector reforms have occurred in Uganda. These included abolishing user fees in public health facilities; increasing subsidies from government to private-not-for-profit (PNFPs) health facilities; and promoting increased utilisation of health services. However, utilisation of maternity services has remained low (Institute of Public Health 2005:54) and the MMR has remained high in Uganda.

STATEMENT OF THE PROBLEM

Uganda’s MOH (2004:37) stated that five out of 56 (8.9%) districts in Uganda achieved the national target of 40% skilled attendance at birth, while in 37 districts (66%) the percentage remained as low as 20%. Mukono district reported 40% institutional deliveries. Although skilled birth attendants are available in Uganda, many women fail to utilise these services and the MMR remains high, including in Mukono district.

Purpose of the study

The purpose of the study was to increase the number of women using maternity services in Mukono district, and thereby to decrease the MMR.

To attain the purpose of the study it was essential to identify factors influencing women’s choices of delivery sites in Mukono district.

The specific objectives of the study were to identify the childbirth sites in Mukono district; describe the socio-demographic characteristics of women who deliver at various sites; describe the factors influencing women’s choice of delivery site; recommend ways for increasing the number of women who deliver their babies at healthcare sites and thereby to reduce the MMR in Mukono district.

RESEARCH METHODOLOGY

A quantitative, descriptive, non-experimental study was conducted. The quantitative approach was justified for this study since the study had elements of measuring and analysing different variables, with the intent of using the findings and applying the knowledge gained for improving service provision. A descriptive design was chosen because the study observed and described the situation as it naturally occurred (Burns & Grove, 2007:34). Such studies give service providers and planners information that helps them to design services and allocate resources more effectively (Katzellenbogen, Joubert & Abdool Karim, 2002:66).
Study area and population

Mukono district has diverse demographic features. It is located in south east Uganda and the projected district population for 2007/08 was 867,300. The annual population growth was 2.7% and the pregnancy rate was 5.2%, thus implying that about 45,000 women were expected to be pregnant from July 2007 till June 2008 (Mukono District Council, 2003:13). Respondents were randomly selected from each stratum and the number per stratum was determined by the percentage contribution of each health sub-district to the expected number of deliveries. The level of confidence for the study was accepted at 95%. The sample size for the study was determined by using the sample estimation formula (George 2000:311) and it came to 358.

Data collection

Structured interviews were conducted to collect the data. They were pre-tested in another district and these respondents did not participate in the actual study. The pre-testing of the structured interview schedule helped to replace ambiguous or vague words. Data collection took place during July 2008 by six social workers who had been trained as research assistants and who travelled to the villages. They presented their approval letters from the district authorities to the village authorities in order not to be mistaken for dubious persons. They then proceeded to randomly select homes to find women who met the inclusion criteria for the study, and conducted individual structured interviews.

Data analysis

A statistician used both Microsoft Excel and the Statistical package for Social Sciences (SPSS) computer programs to process and analyse the data.

Ethical considerations

This research project was approved by the Health Studies Research and Ethics Committee at the University of South Africa (Unisa). Mukono district authorities also gave approval for the study to be conducted in their district. Verbal consent was obtained from each respondent before conducting the interview. Those respondents who preferred to sign consent forms, were allowed to do so. To ensure anonymity, no names were written on any structured interview schedules. No respondent was coerced to be interviewed or to answer any specific question.
Validity and reliability
To control for representativeness of the sample, stratified as well as random sampling techniques were used to minimise the bias of the study. Reliability was enhanced by pre-testing the questionnaire. Training the interviewers enhanced reliability of the data collection process. Supervision and periodic checks during the data collection process also served to enhance the reliability of the collected data.

RESEARCH RESULTS

Demographic characteristics
A total of 431 women were interviewed. Although most respondents (88.2%; n = 380) fell within the 18–35 year age group, the largest number of women (57.5%; n = 248) fell within the 18–28 year age group. Table 1 shows the details of their age categories.

Table 1: Ages of women delivered in Mukono district

<table>
<thead>
<tr>
<th>Age group</th>
<th>Result</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Younger than 18 years</td>
<td>18</td>
<td>4.2%</td>
</tr>
<tr>
<td>18–28 years</td>
<td>248</td>
<td>57.5%</td>
</tr>
<tr>
<td>29–35 years</td>
<td>132</td>
<td>30.6%</td>
</tr>
<tr>
<td>36 years and older</td>
<td>33</td>
<td>7.7%</td>
</tr>
<tr>
<td>Total</td>
<td>431</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Out of the 431 women, 49.0% (n = 211) had 2–4 pregnancies as shown in figure 1.

Figure 1: Women’s number of pregnancies
The findings reveal that Mukono district’s fertility rate was high since 82.4% (n = 355) of all the women had two or more children. This conforms to the MOH’s (2005:6) estimate that the total fertility rate for Ugandan women was 6.9 children.

In terms of religious affiliations, the Catholics dominated (37.1%; n = 160). These findings concur with the findings of the 2001 population and housing census which put Catholics at 37.1%, Anglicans at 31%, Muslims at 21%, Pentecostals at 7% (Mukono District Council, 2007:3).

The economic activities of the women were analysed in relation to the major broad economic activities namely: peasant or subsistence farming, business which included all forms of self employment other than farming, and formal employment implying salaried jobs. These results are shown in table 2.

In Mukono district most women are poor as evidenced by peasant farming being women’s major economic activity (58.9%; n = 254) and 20.0% (n = 86) having no employment. Poor women might encounter financial challenges to access healthcare.

Table 2: Women’s economic activities

<table>
<thead>
<tr>
<th>Economic activity</th>
<th>Result (n)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>86</td>
<td>20.0%</td>
</tr>
<tr>
<td>Peasant</td>
<td>254</td>
<td>58.9%</td>
</tr>
<tr>
<td>Business</td>
<td>52</td>
<td>12.1%</td>
</tr>
<tr>
<td>Formal employment</td>
<td>39</td>
<td>9.0%</td>
</tr>
<tr>
<td>Total</td>
<td>431</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Access to healthcare services

Out of the 431 women, 168 (40.0%) lived within one kilometre of a healthcare facility; 155 (36.0%) lived 1–2 kilometres from a healthcare facility; 65 (15.1%) lived 3–4 kilometres away; and 43 (10.0%) lived five or more kilometres away. Accessibility in terms of distance to the nearest healthcare facility, was adequate according to Uganda’s Health Sector Strategic Plan II (HSSP II 2006–2011), which recommends that all Ugandans should be able to access a minimum healthcare package within a radius of five kilometres. Accessibility to healthcare services affects their utilisation (Amooti & Nuwaha, 2000:203). The current study’s results indicated that 94.9% (n = 409) of the women had attended antenatal clinics, while only 5.1% (n = 22) had not done so. Similar results of 93% (for first visits) antenatal attendance in Uganda were reported by the MOH (2005a:9).
Childbirth sites
There were four delivery sites in Mukono district as illustrated by figure 2.

![Bar chart showing utilization of delivery sites in Mukono district]

Figure 2: Utilisation of delivery sites in Mukono district
These results indicate that 194 (45.0%) women delivered their babies at public health facilities, close to the 40.1% that was reported by the MOH (2005a:9). Adding those women who delivered their babies at private health facilities (26.9%; n = 116), implies that a total of 311 (72.2%) women’s deliveries were conducted under supervision of a skilled birth attendant. This finding might indicate that the number of deliveries by skilled birth attendants reported by the MOH could refer only to deliveries at public facilities.

Women’s reasons for choosing childbirth sites
Women’s choices for specific delivery sites were influenced by their antenatal attendance at the site (36.2%; n = 156); site being near their homes (33.0%; n = 142); site offering friendly services (22.0%; n = 95); and site having affordable services (8.1%; n = 35).

Of the 431 respondents, 246 (57.1%) decided on their own about the selected birth site. Health workers’ roles influenced 47 (10.9%) women, while their husbands influenced 108 (25.1%) women’s decisions about their preferred delivery sites.
The existing health information management system appeared to be only reporting childbirths recorded at the public sites, and not those at the private sites. However, based on the results, four childbirth sites were used by women, namely public sites 45% (n = 194); private services 26.9% (n = 116); home deliveries 10.2% (n = 44); and TBAs 18.3% (n = 79). However, if all conditions were favourable and the women had choices, utilisation would have been: public 66.8% (n = 288); private 26.0% (n = 112); home 5.1% (n = 22); and TBA 2.1% (n = 9). This shows that 92.8% (n = 400) of women would prefer to be delivered by skilled birth attendants. In fact 71.9% (n = 311) actually fulfilled their wish according to this study’s findings, combining those who delivered their babies in public and in private facilities. Sites near their homes were selected by 143 (33.2%) women and 121 (28.1%) delivered their babies at home or with TBAs.

CONCLUSION

The child-bearing age reflected by the results show a larger percentage of young women with a high fertility rate. Most of them came from poor backgrounds of peasantry which had an impact on their choices of birth sites because of financial implications. Public institutions were preferred by most women, who made this choice on their own, without being influenced by health workers or family members.

RECOMMENDATIONS

As more women attended ANCs than those who delivered their babies at healthcare facilities, health education during the antenatal period should be strengthened to inform women about the necessity for delivering their babies at healthcare sites. Ongoing audits should be maintained about women who attended ANCs without delivering their babies at healthcare sites. These results should be used to inform midwives and healthcare providers about reasons why women fail to deliver their babies with skilled assistance. Specific targets, of the percentage of women who deliver at healthcare sites, should be set for each antenatal clinic.

The health information management system should be reviewed and revised in order to capture data from the private healthcare facilities about institutional deliveries.

LIMITATIONS

The research findings are only applicable to Mukono district in Uganda. Although stratified and randomised sampling methods were employed, no guarantee can be given that the respondents truly represented all the women of this district. Only structured interviews were conducted. More in-depth information could have been obtained with indi-
individual or focus group interviews. Only the women’s views were sought, and no inputs were obtained from the healthcare providers.

**Acknowledgements**

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**REFERENCES**


MOH – see Ministry of Health (of Uganda).


WHO – see World Health Organization.


