SHORT REPORT

Abortion in Uganda: Magnitude and Implications

AK Mbonye

ABSTRACT

This study was conducted to assess the status of safe motherhood in Uganda. A total of 97 health units, 30 hospitals, and 67 lower health units were included in the sample. Altogether, 335,682 deliveries, 302 maternal deaths, and 2,978 abortions were documented over a period of one year, with a computed abortion ratio of 8,346 per 100,000 live births and maternal mortality ratio of 846 per 100,000 live births. As high as 340 (11.4%) abortions had occurred in one of the health centres in that year. A total of 1,638 (55%) of the abortions occurred in adolescent girls aged 17–20 years; and 1,575 (52.9%) of mothers who had abortions were not married. Six hundred and eighty five (23%) of all abortion cases resulted into complications — haemorrhage 378 (52.2%), localised infections 238 (34.8%), uterine perforation 60 (8.7%) and cervical injury 9 (4.3%). Capacity to manage abortion complications was found to be limited; 39 (40.2%) of health units were able to manage abortion complications. Of those 39 health units, 31 (79.5%) had a vacuum extractor. Only 2 (2%) had a committee to review abortion cases. (*Afr J Reprod Health* 2000; 4[2]:104-108)

RÉSUMÉ

L'Avortement en Ouganda: Ampleur et Implications. L'étude a été menée dans le but d'évaluer le statut de la maternité sans risque en Ouganda. En tout, 97 services de santé, 30 hôpitaux et 67 services de santé de statut moins élevé ont fait partie de l'échantillon. Dans l'ensemble, au cours d'une année on a documenté 335,682 accouchements, 302 décès maternels et 2978 avortements, avec un rapport d'avortement de 8,346 par 100,000 naissances vivantes et d'un rapport de mortalité maternelle de 846 par 100,000 naissances vivantes. Des avortements dont le nombre remontait jusqu'à 340 (11.4%) ont eu lieu dans un des services de santé au cours de cette année-là. 1638 (55%) des avortements se sont produits chez les adolescentes âgées de 17 - 20 ans. 1,575 (52,9%) des mères qui ont eu l'avortement n'étaient pas mariées. 685 (23%) de tous les cas d'avortement ont abouti à des complications: hémorragie 378 (52,2%), infection localisée 238 (34,4%), rupture de l'utérin 60 (8,7%) et traumatismes cervicaux 9(4,3%). On a trouvé que la capacité de traitement des complications des avortements était limitée; 39(40,2%) des services de santé étaient capables de traiter les complications des avortements. Parmi les 39 services de santé, 31(79,5%) possèdent une ventouse obstétricale. Seulement 2(2%) avaient un comité pour réviser les cas d'avortement. (*Rev Afr Santé Reprod* 2000; 4[2]:104-108)

KEY WORDS: *Abortion, maternal mortality, abortion care, life saving skills, ratio*

Correspondence: *Dr AK Mbonye, Principal Medical Officer. Department of Community Health, Ministry of Health, P.O. Box 7272, Kampala, Uganda.*

Introduction

Maternal mortality and morbidity levels are high in Uganda. In the last decade, effort has been made to quantify the levels of morbidity and mortality, map out trends and patterns, and document the associated factors. A survey on measurement of maternal mortality conducted in 1993 gave an estimated maternal mortality ratio (MMR) of 557 per 100,000 live births. Some rural hospitals had recorded maternal mortality ratios as high as 2,000 per 100,000 live births.[1] The associated factors to the high mortality included the following: high levels of poverty, long distances to health units, low socio-economic status of mothers, lack of equipment and drugs in health units, and inadequate skilled staff. In 1995, another study, the Uganda Demographic and Health Survey, estimated the MMR at 506 per 100,000 live births.[2] The levels of mortality were still high, and use of modern contraceptives was at 15%.[6] Other studies conducted in some hospitals in Uganda show that maternal mortality is high, and that the main causes of maternal deaths are hemorrhage, hypertensive disorders of pregnancy, sepsis, obstructed labour and unsafe abortion.[8,9]

In 1998, abortion-related deaths accounted for 35% of maternal deaths in Mulago hospital.[4,7] Mulago hospital is a national referral and teaching hospital. It also serves Kampala district as a capital city. A study carried out in 1992 by Agyei and Epema found that abortion among Ugandan adolescents was quite high. Of the 4,510 adolescents interviewed, 17% aged 15–18 years and 53% aged 22–24 years had had an abortion. The study found a low contraceptive use of 24% by adolescents.[10]

There has also been effort at a regional level to understand levels of maternal mortality. For example, a study to assess risks associated with maternal mortality was commissioned in 1995 in Lesotho, Malawi, Uganda and Zambia. This study found that maternal mortality in Uganda was 400 per 100,000 live births and that young girls aged 17 years or less, and single women, were at risk of dying from abortion-related complications. Overall, abortion contributed to 27.8% of maternal deaths. The study found a similar pattern in Lesotho, Malawi and Zambia.[5] An earlier study carried out in Zambia showed similar findings but further revealed that 64.3% of abortion-related deaths were induced abortions.[3]

Information on abortion care in Uganda is scanty and in most cases incomplete. This is because induced abortion is illegal and is carried out only for medical indications. This contributes a lot to the paucity of information on abortion in Uganda. The health information system captures mainly the number of abortions reported at health units. But there is normally under-reporting; the data cannot be categorised into types of abortion, and circumstances surrounding abortion are never documented.

The above evidence shows that abortion-related complications contribute a great proportion to maternal deaths, not only in Uganda but in other countries as well. This has a bearing on the quality of health services, the health seeking behaviour of mothers, and policies to address safe motherhood issues. Since 1995, a program involving training of health workers in lifesaving skills and post-abortion care has been implemented in Uganda. Health units have been equipped, and regular support supervision of district health services conducted. It is expected that the magnitude of maternal deaths will reduce through this improved care.

The main goal of this study was to access the status of maternal services in Uganda before implementing a national safe motherhood program. Specifically, the study intended to document the magnitude of abortion cases in health units and the availability of post-abortion care services.

This paper presents results on the magnitude of abortion in Uganda, its complications and the policy implications. Further research on circumstances surrounding abortion is however suggested.

Materials and Methods

The safe motherhood needs assessment was conducted in 24 randomly selected districts of Uganda. In each district, all the hospitals were included in the sample, while 20% of lower health units were categorised and selected with a probability proportional to their size and the type and range of services they offer. The assessment was based on structured survey forms developed by the World Health Organization (WHO).[11] The reference period for documenting abortion cases was

between January 1995 and January 1996. The International Classification of Diseases (ICD 10) was used to define abortion cases. A total of 97 health units were sampled, of which 30 were hospitals and 67 were lower health units. Records documenting abortion in each health unit were analysed.

Results

Table 1 shows the number of deliveries, maternal deaths and abortions that occurred in 97 health units from January 1995 to January 1996.

A total of 35,682 deliveries, 302 maternal deaths, and 2,978 abortions were documented during the period. They represent a maternal mortality ratio of 846 per 100,000 live births and an abortion ratio of 8,346 per 100,000 live births. A total of 2,441 (82.0%) abortions occurred in hospitals, while 573 (18%) occurred in lower health units. Similarly, most maternal deaths, 262 (86.8%), occurred in hospitals, compared with 40 (13.2%) that occurred in lower health units. Averagely, each hospital registered 975 deliveries, 9 maternal deaths, and 122 abortions in one year. Averagely, the lower health units registered 132 deliveries, 1 maternal death, and 15 abortions.

The types of abortion are indicated in Table 2. Spontaneous abortions were 1,375 (46.2%), while induced abortions accounted for 1,147 (38.5%). Those abortions whose natures were undetermined accounted for 456 (15.3%) of the total.

Table 3 shows the complications of abortions. Hemorrhage was the most common complication, accounting for 52.2%, sepsis accounted for 34.8%, uterine perforation 8.7%, and cervical injury accounted for 4.3% of the cases.

Table 1 **Number of Deliveries, Abortions and Maternal Deaths in 97 Health Units**

Health unit	Deliveries		Maternal deaths		Abortions	
Hospitals	Total	Mean	Total	Mean	Total	Mean
30	29,237	975	262	9	2,441	122
Health centres	Total	Mean	Total	Mean	Total	Mean
67	6,445	132	40	1	537	15
Total						
97	35,682		302		2,978	

Table 2 **Types of Abortion**

Type of abortion	Frequency
Spontaneous	1,375 (46.2%)
Induced	1,147 (38.5%)
Unknown	456 (15.3%)
Total	2,978 (100%)

Table 3 **Complications of Abortion observed among 685 Patients**

Complications of abortion	Frequency
Hemorrhage	378 (52.2%)
Sepsis	238 (34.8%)
Uterine perforation	60 (8.7%)
Cervical injury	9 (4.3%)
Total	685 (100%)

The capacity to manage abortion in the health units surveyed was found to be limited. About 65.6% of the health units had vaginal specula of different sizes in working condition, while 32.3% had vacuum extractors.

Some (40.2%) of the health facilities were able to manage abortion complications, while 57.7% of them could manage sepsis.

An important finding in this study was that, of the 97 health units visited only two (2.0%) had a committee to review abortion cases and followed written recommendations. The highest number of abortions that had occurred in one single health unit was 340, while the mean number for all health units was 20 abortions.

The midwives interviewed suggested the following recommendations to prevent deaths due to abortion:

1. The need for mothers to attend antenatal care and to have access to family planning services.
2. Effective health education to increase awareness on the dangers of abortion.
3. Equipping health units with enough supplies and drugs.
4. Training midwives in management of abortion complications and establishing a good referral system.
5. Increasing blood supply to health facilities, since hemorrhage is the commonest complication of abortion.

Discussion

Abortion and its complications pose a great danger to Ugandan women, because most of them do not visit health units for care. The situation is even more complicated when an abortion is induced. In this study, 38.5% of the abortions were classified as induced; it is possible that some abortions classified as unknown could actually have been induced abortions. Since abortion is illegal in Uganda, the punitive measures against the act may be deterring women from seeking health care. Thus, women may seek abortion from unqualified people who do not have skill and adequate facilities to offer abortion care. This exposes them to a high risk of maternal death. The religious and cultural stigma associated with abortion compounds the problem. Hemorrhage and sepsis are the two most frequent complications found in this study. There is inadequate blood supply in most health units in Uganda. Currently, blood is available at hospitals and some big health centres. In fact, of the 97 health units surveyed, only 28% were offering blood, from where emergency blood was accessible. Abortions occurring in communities may present at lower health units where blood may not be available. Sepsis is a serious complication of abortion; it requires availability of antibiotics, diagnostic services especially laboratories, and intravenous fluids replacement. One finding from the needs assessment was that 2% of the health units surveyed had ceftriaxone injection and 27% had ampicillin injection.

The study results compare well with findings from other developing countries where abortion is high and a leading cause of maternal mortality. The underlying reasons for the high rate of abortion observed in this study may be explained partly by the high prevailing fertility rate in Uganda (6.9%), and the low contraceptive prevalence rate of 15%.[2] The rate of adolescent pregnancy in Uganda is 42.9%, the highest in sub-Saharan Africa, while unmet demand for family planning is 29%.

There is poor service availability for post-abortion care ranging from inadequate skills to lack of equipment, supplies and drugs in most health units in Uganda.

The study found that recording of information on abortion was largely incomplete. This undermines our understanding of the circumstances surrounding abortion cases. The result of this study highlights the high magnitude of abortion cases in Uganda. We suggest that a study on the circumstances surrounding abortion be conducted to review the magnitude of induced abortions, determine the health seeking behaviour, family support and the attitude of patients and health workers towards abortion both at the health unit and community levels.

REFERENCES

1. Ministry of Health. Measurement of maternal mortality and morbidity in Uganda. Uganda, 1993, pp 2-3.
2. Ministry of Planning and Economic Development The Uganda Demographic and Health Survey (UDHS), 1995.
3. Mhango C, Rochat R and Arkut A. Reproductive mortality in Lusaka, Zambia 1982– 983. *Studies in Family Planning* 1988; 17(5): 243–251.

4. Mirembe FM. A situation analysis of induced abortion in Uganda. Makerere University, 1994.
5. Mirembe FM. Risk factors associated with maternal mortality in Lesotho, Malawi, Uganda and Zambia. In: Maternal mortality: policy implications for current research CHDC, Makerere University Kampala, Uganda, 1996.
6. Ministry of Planning and Economic Development. The Uganda Demographic Survey (UDHS), 1988.
7. Mulago Hospital. Mortality and morbidity. *Annual Report* 1997. Mulago Hospital, Kampala, Uganda.
8. Ministry of Health. The National Health Policy, Uganda, 1999.
9. Ministry of Health. National Reproductive Health Guidelines and Service Delivery, Uganda, 1999, pp 20-22.
10. Agyei WK and Epema EJ. Sexual behaviour and contraceptive use among 15–24 year olds. *International Family Planning Perspective* 1992; 18(1): 13–17.
11. World Health Organization. *Safe Motherhood Needs Assessment Tools.* Geneva: WHO, 1995.

4. Azuzu MC. Sexual beliefs, attitudes and knowledge of adolescent youth in Ibadan concerning AIDS. *West African J of Med.* 1994; 13(4): 245–247.
5. World Health Organization. From Alma Ata to the Year 2000; Reflections at the Midpoint, WHO Geneva, 1998; 3–49.
6. Luckner JL and Gonzales BR. What deaf and hard of hearing adolescents know and think about AIDS. *Am Ann Deaf* 1993; 138 (4): 338–42.
7. Peinkoffer JR. HIV education for the deaf, a vulnerable minority. *Public Health Rep.* 1994; 109 (3): 390–6.
8. Rosentock IM. The health belief model and preventive health behaviour. *Health Educ. Monograph* 1974; 2: 354–356.
9. Adjzen I and Fishbein M. *Understanding Attitudes and Predicting Social Behaviour.* Englewood Cliffs NJ: Prentice Hall, 1980.
10. Howard M and McCabe JB. Helping teenagers postpone sexual involvement. *Fam Plann Perspect* 1990; 22(1): 21–26.
11. Watson JD. Talking about the best kept secretes: sexual abuse and children with disabilities. *Exceptional Parent* 1984; 14(6): 15–22.