

## DOCUMENTING THE ECONOMIC COST OF UNSAFE ABORTION AMONG POST-ABORTION CARE PATIENTS IN UGANDA

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### Introduction:

Despite evidence of high unmet demand for contraceptives in Uganda, use of modern methods remains low, with no sign of it increasing to meet this demand (Uganda Bureau of Statistics 2007). The resulting wide gap between wanted and actual fertility leaves a large number of Ugandan women to resort to meeting their fertility goals through abortion, despite the fact that abortion is highly legally restricted. A study found that the abortion rate in Uganda is among the highest in the world, rivaling those of Eastern European countries: 54 abortions per 1000 women age 15-49 (Singh *et al.* 2005). Yet abortion is permitted in the country only to save a woman's life. As in other settings in which access to legal abortion is low, most women must resort to clandestine abortions, most of which are performed under dangerous conditions.

Because of its high prevalence and the unsafe conditions in which it usually takes place, abortion exacts a heavy toll on women's lives in Uganda. A study carried out in 1993 in three Kampala hospitals found that one out of five maternal deaths was caused by unsafe abortion, making unsafe abortion one of the leading causes of maternal morbidity and mortality (Mirembe and Okong, 1995). A recent government paper estimated that 26% of maternal mortality resulted from unsafe abortion (Road Map 2008)—this in a country with a high rate of maternal mortality, estimated at 550 per 100,000 live births (WHO, UNICEF, UNFPA and World Bank, 2007). Medical complications resulting from unsafe abortion also constitute a serious burden for both women and the health care system. Singh *et al.* (2005) estimated that almost 85,000 women are treated for complications from unsafe abortions in Uganda annually, and that is just a fraction of the problem as many more women were not as lucky to make it to the health facility. The most frequent complications of unsafe abortion are incomplete abortion, infection (sepsis), hemorrhage and injury to the internal organs, such as puncturing or tearing of the uterus. Unsafe abortion also has long-term health problems, which include chronic pain, pelvic inflammatory disease and infertility (Ahman *et al.*, 2007; Grimes *et al.*, 2006).

The economic cost to health systems of unsafe abortion has only recently begun to be investigated. One study, which made use of existing cost data, estimated the global cost at \$553 million and the cost to health systems in sub-Saharan Africa at \$117 million (Vlassoff *et al.* 2008). A study on Nigeria estimated the cost to the health system of treating complications from unsafe abortion at \$19 million a year (Bankole *et al.*, 2007). Another study on Uganda has found

that the total national cost of treating complications due to unsafe abortions is about \$14.4 million a year (Vlassoff et al., 2012). The Nigeria study (Bankole *et al.*, 2007) also found that providing contraceptive services that would have averted the unwanted pregnancies would have cost only one-quarter (\$4.5 million) this amount. Similarly, the Uganda study (Vlassoff et al., 2012) has found that for every dollar spent on contraceptive services, \$5 would be saved on treating complications due to unsafe abortions.

In general, in the developing world, although some empirical evidence is available on health system costs, very little data are available from primary sources on any of the other costs resulting from unsafe abortions, namely, out-of-pocket expenditures for post-abortion care, reduced productivity, and debt burden or reduced human capital investment. A study of the costs implied by these numbers would help put this grave problem in better perspective.

The objective of this paper is to examine the economic costs of unsafe abortion to post-abortion care (PAC) patients and their households in Uganda. We will examine how unsafe abortion affects individual and household economic wellbeing via direct costs (as measured by out-of-pocket expenditures); indirect costs (income and time loss); and the level of household and individual impoverishment through coping strategies (as measured by distress asset sales, debt burden and loss of human capital investment). Findings from this paper will be crucial as they help to meet a need for critical evidence for advocacy. Providing evidence on the costs of unsafe abortion to individual women and their households was identified by key informants in Uganda as a priority area of research, both at a 2006 African consultation of researchers, policymakers and advocates in Addis Ababa, Ethiopia, and during a series of in-depth interviews with key stakeholders conducted in 2008. However lack of quality research in this area has prevented a better understanding of the economic burden to women who are forced to resort to unsafe abortion.

### **Data and Methods:**

The paper will use data from a primary data collection effort, which surveyed 1,350 women admitted into health facilities in Uganda for treatment of complications of abortion, and their health care providers. The survey was administered in 38 public and private health facilities selected to represent different levels facilities and different regions of Uganda. Although women with complications from unsafe abortion are the focus of the study, information was also collected from women who reported that their complications were due to spontaneous abortions. This allows for comparison with those with PAC complications, where applicable.

In order to better assess the economic impact of treating complications from unsafe abortions, we also did a follow-up survey of 518 women in our sample, between 1 and 3 months after the initial survey.

The initial survey collected data on various topics, including the amount of money women and their households spent on obtaining an unsafe abortion, obtaining post-abortion care, and

recuperating from an unsafe abortion. Information relating to the women's admission into the health facility, including the nature and severity of their complications, the treatment they received and duration of hospital stay were also collected from each patient's principal post-abortion care provider. Information is also collected from women who reported that their complications were due to spontaneous abortion for the purpose of comparison where applicable.

The economic data that we collected includes data on household income, assets, savings, and debt. We also asked the PAC patients about their out-of-pocket expenditures, their sources of funds, and the amount of productive time lost for both for the respondent and other members of their household members as a result of the attempt to terminate the pregnancy in an unsafe manner. Because the economic burden of unsafe abortion does not end with the cost of hospital treatment but may also accrue following hospital discharge, the follow up interviews also included similar questions to get an update on women's economic situation, and collected information on additional direct and indirect costs that accrued since their hospital discharge.

Our analysis will document the economic costs to women and their households of unsafe abortion, steps taken to obtain the abortion-related treatment in the facility and any subsequent short-term morbidity and related medical costs. A second component of the analysis will focus on the severity of complications and the cost differentials in treating them. A final component of the analysis will describe the coping strategies used by women and their households—asset sell-off, increases in debt, decreases in human-capital investment—to assess whether abortion-related complications are associated with increased impoverishment. All analyses will be done in SAS using appropriate statistical techniques, including bivariate and multivariate analyses of associations.

### **Expected Results:**

The first set of results from our analysis of the initial survey indicates that 61% of the women in our sample, who received treatment for complications from unsafe abortions, either certainly or probably, had an induced abortion. Only about 40% of the women were reported as being likely to have had a miscarriage (data not shown). Our results also show that a majority of the women (about 72%) were under age 30 (Table 1), with about a quarter of the sample being under age 20. Additionally, about 35% of these women had no children, and a majority (67%) were married.

Our runs also indicate a clear differential by socioeconomic status: 62% of the women receiving post-abortion care treatment (PAC) were from rural areas, and 55% had no access to basic amenities such as a flush toilet, piped water, and electricity. Although over half the respondents said they had some secondary education, 46% had primary education or less. The results also show that while on average women paid about \$17 for PAC treatment, about 30% paid more than this average amount (data not shown).

Based on the findings from our preliminary analysis, in our subsequent analyses, we expect to find that the heaviest economic burden of unsafe abortion will fall disproportionately on the

poorest Ugandan women. Women who are economically and socially well to-do will be better able to avoid having an unsafe abortion, and will therefore not have to bear the costs associated with it. Poorer women on the other hand will have to bear the double burden of paying for an unsafe abortion, and of paying for the post-abortion care costs. Being in an economically perilous position already, these costs will likely put them in a much worse economic position. The women's ill health may even force other members of their family to give up their jobs or their education in order to take care of the household for the time that the women are in a health facility, or even longer in the event that the women's ill health is lasting.

### **Conclusions:**

In Uganda, the abortion law is very restrictive and induced abortion is permitted only when pregnancy endangers a woman's life. While research to date has helped raise awareness of the impact of unsafe abortion on maternal health and survival, data on the economic impact of unsafe abortion is needed to persuade a different, but critically important, set of decision-makers in Uganda—namely, the Ministries of Health and Finance, and others with responsibility for the “purse strings.” These individuals are highly influential in setting government priorities, and capturing their attention will require hard evidence on the costs of unsafe abortion. Findings from this study will equip policy makers and program planners with evidence-based information to determine necessary policy and program reforms to address the high level of maternal mortality and morbidity associated with unsafe abortion in the country.

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Table 1. Distribution of women who certainly/probably/possibly had an induced abortion, by selected independent variables, Uganda, 2011

Variables	Women who certainly/probably/possibly had an induced abortion	
	N	% distribution
<b>Demographic variables</b>		
Age		
Under 20	230	24.1
20-29	463	48.5
30+	262	27.4
Total	<b>955</b>	<b>100</b>
Parity		
No children	335	34.7
1-2 children	317	32.8
3 or more children	314	32.5
Total	<b>966</b>	<b>100</b>
Marital Status		
Never married	318	32.7
Ever married	654	67.3
Total	<b>972</b>	<b>100</b>
<b>Socioeconomic characteristics</b>		
Urban-rural residence		
Rural	599	61.6
Urban	373	38.4
Total	<b>972</b>	<b>100</b>
Access to basic amenities*		
No access	537	55.3
Have access	435	44.8
Total	<b>972</b>	<b>100</b>
Education level		
Primary school and below	414	45.6
Middle and below secondary	397	43.7
Secondary school and above	97	10.7
Total	<b>908</b>	<b>100</b>

\*Basic amenities include flush toilet, piped water, and electricity