Self-Reports of Induced Abortion: An Empathetic Setting Can Improve the Quality of Data

Vibeke Rasch, MD, Hamed Muhammad, MD, Ernest Urassa, MD, and Staffan Bergström, MD, PhD

A B S T R A C T

Objectives. This study estimated the proportion of incomplete abortions that are induced in hospital-based settings in Tanzania.

Methods. A cross-sectional questionnaire study was conducted in 2 phases at 3 hospitals in Tanzania. Phase 1 included 302 patients with a diagnosis of incomplete abortion, and phase 2 included 823 such patients.

Results. In phase 1, in which cases were classified by clinical criteria and information from the patient, 3.9% to 16.1% of the cases were classified as induced abortion. In phase 2, in which the structured interview was changed to an empathetic dialogue and previously used clinical criteria were omitted, 30.9% to 60.0% of the cases were classified as induced abortion.

Conclusions. An empathetic dialogue improves the quality of data collected among women with induced abortion. (*Am J Public Health.* 2000; 90:1141–1144)

International awareness of the problem of unsafe abortion increased following the 1987 Safe Motherhood conference in Nairobi, which drew attention to the need to reduce maternal mortality. According to the World Health Organization (WHO), about 600 000 women die each year during pregnancy or immediately after giving birth.[1]

In Tanzania, pregnancy interruption is allowed only if the pregnancy is a threat to the woman's life. The magnitude of the problem of unsafe abortion at the community level in Tanzania is unknown, but hospital-based studies on the incidence of complicated, incomplete abortions indicate that such terminations are common.[6] It has been estimated that unsafe abortion is a contributory factor in 15% of maternal deaths in Dar es Salaam.[5]

Studies in sub-Saharan Africa have shown that women who have undergone illegal abortion are reluctant or unwilling to discuss their experiences for fear of negative personal, social, legal, and even medical consequences.[7,8] Because of these complexities, underreporting is common, making it difficult to estimate the magnitude of the problem of unsafely induced abortion. Because unsafely induced abortion is one of the major factors behind the high maternal mortality rate, there is a demand for reliable data on this issue in order to understand and better address the determinants and consequences of illegal abortion, and improved techniques to achieve this are needed.[9]

The purpose of this study was to estimate, via 2 different methods of fact-finding, the proportion of allegedly spontaneous, incomplete abortions that are induced in hospital-based settings in Tanzania.

Methods

Patients admitted with a diagnosis of incomplete abortion at the emergency gynecologic ward of Temeke District Hospital (TDH) and Muhimbili Medical Centre (MMC), Dar es Salaam Region, and Dodoma Regional Hospital (DRH), Dodoma Region, were consecutively included in the study. The study was carried out in 2 phases, the first in Dar es Salaam and Dodoma and the second only in Dar es Salaam.

Dar es Salaam consists of 3 districts: Kinondoni, Ilala, and Temeke. The study was conducted in the Temeke District, which has 1 district hospital for a population of half a million. MMC is the university teaching hospital in Dar es Salaam. In theory, it is a tertiary institution, but in practice it functions also as a primary and secondary level health unit. DRH serves a population of 1.2 million and is also the primary hospital for the Dodoma Urban District.

Phase 1

Data were collected in the emergency gynecologic wards at TDH and MMC, Dar es Salaam, and at DRH, Dodoma, for the period December 1, 1996, to January 31, 1997. A trained female interviewer in each hospital interviewed (in Kiswahili) a total of 302 women who were admitted with incomplete abortions. The answers were entered in the questionnaire in English. Each patient was ensured confidentiality and anonymity during the interview. Questions focused on socioeconomic characteristics, contraceptive use, and circumstances characterizing the induction.

We used criteria from the WHO task force on the sequelae of abortion[10] to classify the cases. The criteria were based on both clinical examination and information from the patients. Cases were classified as certain when the women themselves said they had had an induced abortion or when there was evidence of physical manipulation, such as genital trauma or the presence of a foreign body in the vagina. Cases were classified as probable when genital sepsis was present *and*

Vibeke Rasch is with the Department of Obstetrics and Gynaecology, Odense University Hospital, Odense, Denmark. Hamed Muhammad is with the Department of Obstetrics and Gynaecology, Dodoma Regional Hospital, Dodoma, Tanzania. Ernest Urassa is with the Department of Obstetrics and Gynaecology, Muhimbili Medical Centre, Dar es Salaam, Tanzania. Staffan Bergström is with the Division of International Health (IHCAR), Department of Public Health Sciences, Karolinska Institutet, Stockholm, Sweden.

Requests for reprints should be sent to Vibeke Rasch, MD, Department of Obstetrics and Gynaecology, Odense University Hospital, DK-5000 Odense C, Denmark (e-mail: v.rasch@dadlnet.dk).

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	MMC		TDH		DRH	
TABLE 1—Abortion Cases Classified According to Clinical Criteria at Muhimbili Medical Centre (MMC), Temeke District Hospital (TDH), and Dodoma Regional Hospital (DRH) (Phase 1) and Abortion Cases Classified After In-Depth Empathetic Dialogue at MMC and at TDH (Phase 2)						
	n	%	n	%	n	%
Phase 1						
Certainly induced abortion	14	16.1	11	8.0	3	3.9
Woman's statement	14	16.1	10	7.1	3	3.9
Evidence of genital trauma	0	0.0	1	0.8	0	0.0
Evidence of foreign body	0	0.0	1	0.0	0	
Probably induced abortion (sepsis and unplanned pregnancy)	1	1.1	2	1.4	0	0.0
Possibly induced abortion	21	24.1	55	39.9	11	14.3
Sepsis	2	2.3	4	2.9	1	1.3
Unplanned pregnancy	19	21.8	51	37.0	10	13.0
Spontaneous abortion	51	58.6	70	50.7	63	81.8
Phase 2						
Induced abortion	68	30.9	362	60.0	…	…
Spontaneous abortion	152	69.1	241	40.0	…	…

Note. Phase 1 was conducted from December 1, 1996, to January 31, 1997. Phase 2 was conducted from February 1, 1997, to May 15, 1997.

the pregnancy was said to be unplanned. Cases were classified as possible when genital sepsis was present *or* the pregnancy was said to be unplanned. All other abortions were classified as spontaneous.

Phase 2

On evaluating the results of phase 1, we felt there was substantial misclassification of both induced and spontaneous abortions, probably for the following reasons: (1) the use of loss of an unplanned pregnancy as a criterion probably resulted in some spontaneous abortions being misclassified as induced; and (2) some induced abortions were probably misclassified as spontaneous because the women were reluctant to acknowledge the induction.

Therefore, in phase 2 we made 4 changes to the protocol. First, to obtain the patients' confidence, the interviews were conducted under strict privacy as an empathetic, in-depth personal dialogue. Second, the criterion of unplanned pregnancy was dropped. Third, the clinical criteria of genital trauma and the presence of a foreign body were dropped because they rarely occurred. Finally, cases were classified into just 2 categories: induced abortions and spontaneous abortions.

The interviewer selected was of the same culture as the patients. She developed her empathetic skills through guided interviews, in which one of the authors (V.R.) participated. Confidentiality was obtained by taking the patient to a separate room and commencing the dialogue by approaching the patient's general life situation. It was stressed that the interviewer should not take any kind of notes or ask whether the abortion had been induced before she had achieved the patient's confidence. To ensure that the answers were valid, patients saying they had had an induced abortion were asked to describe the circumstances under which it had been induced. Only when the interviewer felt convinced that she had gotten a trustworthy answer regarding whether or not the abortion had been induced was the patient asked to answer the questions from the questionnaire. The questionnaire from phase 1 was used.

In phase 2, 823 patients were interviewed during a 3½-month period (February 1, 1997–May 15, 1997) in the 2 hospitals in Dar es Salaam (TDH and MMC).

Data were recorded and analyzed with Epi Info 6.03.[11] Data were double-entered, and the validation program was used to compare them. The questionable entries were reconciled. For comparing proportions, χ^2 tests were used.

All patients were informed that participation in the study was voluntary and that their further treatment would not be affected by whether or not they participated. Informed consent was obtained orally, because most women feared lack of anonymity if they signed a written form of consent. In both phases, none of the patients who were invited to participate in the study refused interviews.

Results

Phase 1

A total of 302 patients were included in phase 1 (Table 1).

Few patients admitted to, or had physical evidence of, induced abortion (range = 3.9% [DRH]–16.1% [MMC]). On the basis of a combination of sepsis and reporting of unplanned pregnancy, 3 abortions were classified as probably induced. These prevalences reflect the fact that complications such as genital trauma or a foreign body in the genital tract are rare and that, presumably, the women were reluctant to admit having had an induced abortion.

The prevalence of cases of possibly induced abortion ranged from 14.3% to 39.9%, with such case being most numerous at TDH. The high figure at TDH is in part due to the large proportion of unplanned pregnancies in the Temeke District and in part, presumably, to the underreporting of certainly induced abortion.

Spontaneous abortion was the single most prevalent category of gynecologic emergencies in all 3 settings, with the prevalence ranging from 50.7% to 81.8%.

Phase 2

A total of 823 patients were included in phase 2. A total of 30.9% of the cases at MMC and 60.0% of the cases at TDH were classified as certainly induced abortion.

Table 2 shows the proportions of complications and unplanned pregnancies among patients with certainly induced abortion and spontaneous abortion. Significantly more patients in the former group had complications such as genital trauma, the presence of a foreign body in the vagina, sepsis, and foul smell than in the latter group at both MMC and TDH. The proportion of unplanned preg-

TABLE 2—Prevalence (%) of Complications and Unplanned Pregnancy During Phase 2 Among Women With Induced Abortion (IA) and Spontaneous Abortion (SA) at Muhimbili Medical Centre (MMC) and Temeke District Hospital (TDH)

	MMC IA, % n = 68	MMC SA, % n = 152	MMC IA vs SA, <P	TDH IA, % n = 362	TDH SA, % n = 241	TDH IA vs SA, <P
Complication						
Genital trauma	4.7	0.0	<.001	14.8	0.0	<.000001
Foreign body	0.0	0.0		3.4	0.0	<.05
Sepsis	57.8	2.8	<.000000	8.9	1.3	<.005
Foul smell	56.3	2.8	<.000000	14.9	3.3	<.0005
Unplanned pregnancy	98.5	11.2	<.000000	99.2	34.9	<.000000

nancies was also significantly higher in the former group.

Discussion

At TDH, 60% of the patients admitted with an incomplete abortion stated that they had had an induced abortion. In countries where induced abortion is illegal, unsafe abortions are known to be widely practiced and women are frequently admitted to the hospitals with incomplete abortion after attempting to terminate their pregnancies.[12–14] A hospital-based study from Ethiopia found that 53% of all women who were admitted because of an incomplete abortion had in fact induced their abortion clandestinely.[12] It has also been shown that the treatment of complications following an unsafe abortion is a burden to society in terms of both personnel and economic resources.[15]

Phase 1 showed that complications such as genital trauma or a foreign body in the vagina are rare and that few induced abortions will be identified on the basis of these complications. The use of sepsis as a criterion for classifying an abortion as probably or possibly induced depends on the assumption that risk of infection is much higher after an induced abortion than after a spontaneous abortion. Among women in low-income countries, the proportion of spontaneous abortions that result in localized infection or sepsis is unknown. If it is large, there may be substantial misclassification among, for example, women with febrile diseases like malaria.

Defining a pregnancy as planned or unplanned is complex: contraceptive prevalence is low, and women have little autonomy in birth control. An unplanned pregnancy may be either wanted or unwanted, and a planned pregnancy may become unwanted. In our study, 30% of the women attending antenatal clinics stated that their pregnancy was unplanned (data not shown).

Because genital trauma and the presence of a foreign body are rare, and because sepsis and a woman's statement of unplanned pregnancy might lead to misclassification, none of these complications seem to be good criteria to use in classifying induced abortions. Previous studies on abortions and their classification have primarily focused on the misclassification of induced abortions as spontaneous abortions. However, it is important to be aware that misclassification goes in both directions—truly spontaneous abortions can be misclassified as induced (by using unplanned pregnancy as a criterion), and truly induced abortions can be misclassified as spontaneous (if too rigorous clinical criteria are used). Both kinds of misclassification have consequences and program implications.

Unreliable data obtained from women for whom there is clinical suspicion of induced abortion are common where induced abortion is illegal.[7,8] Our study has shown that when women had a confidential, in-depth dialogue with an empathetic interviewer, without a questionnaire and under strict privacy, they were willing to provide information. The success of this method depends on the interviewer's ability to create a confidential situation. In a parallel study, we compared 3 different groups of pregnant women—women attending antenatal care, women with spontaneous abortion, and women who had had an illegally induced abortion—and found similar socioeconomic characteristics among the women in the first 2 groups, who differed from those in the latter group.[16] This observation lends indirect support to the assumption that the in-depth, empathetic dialogue method distinguishes induced from spontaneous abortions.

In summary, the empathetic approach to interviewing patients that was used in the second phase of our study is an improvement over the method that we started with and that others have used. The horrendous number of women admitted with unsafe abortions reflects the fact that the Tanzanian family planning program does not reach those most in need of contraceptives. In accordance with public opinion, adolescents are not admitted at family planning clinics. Improving the family planning program could substantially reduce this toll of human suffering and the corresponding cost to health services. □

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