

The Incidence of Induced Abortion in Zimbabwe

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Short Abstract

With Zimbabwe's high maternal mortality, there is a pressing need to better understand unsafe abortion. The prolonged economic crisis is affecting the health care system and thereby the availability and potentially quality of post-abortion care (PAC) in the country. Using the Abortion Incidence Complications Methodology (AICM) and the Prospective Morbidity Methodology (PMM), this paper estimates the national incidence of induced abortion, the proportion of unintended pregnancies, and the quality of post-abortion care. Our analysis draws on three national surveys conducted in 2016: a retrospective census of 245 health facilities with the capacity to provide PAC, a prospective survey of women seeking abortion-related care in a nationally representative sample of those facilities, and a purposive sample of 118 experts on abortion. This is the first national estimate of the abortion rate in Zimbabwe, strengthening the evidence base of the sexual and reproductive health needs in this context of declining economic stability.

Extended Abstract:

Background

An estimated 22 million unsafe abortions take place globally every year, resulting in approximately 47,000 deaths and disability in an additional 5 million women (World Health Organization, 2011). Ninety-five percent of these deaths and complications related to unsafe abortion occur in the developing world (World Health Organization, 2011). It is estimated that unsafe abortion accounts for approximately 8-18% of maternal deaths globally (Say et al., 2014; Kassebaum et al., 2014). In the Eastern Africa region, an estimated 34 out of 1,000 women aged 15-44 had abortions in 2010-14 and 18% of maternal mortality was due to unsafe abortion in the sub-region (World Health Organization, 2011; Sedgh et al., 2016). In Zimbabwe, maternal mortality is high, estimated at 651 per 100,000 live births in the 2015 Demographic and Health Survey, and unsafe abortion represents one of its leading causes (Zimbabwe National Statistics Agency and ICF International, 2016). In juxtaposition to the goal of reducing maternal mortality laid out in the Millennium Development Goal 5, over the past 25 years Zimbabwe has experienced an increase in its maternal mortality ratio (WHO, UNICEF, UNFPA and The World Bank). It is unknown, however, how many women in Zimbabwe have unsafe abortions, nor the health consequences of unsafe abortion.

Over the past two decades, Zimbabwe has undergone a period of extended economic crisis and declining standards of living. Despite these challenges, it has managed to maintain a strong family

planning program with one of the highest contraceptive prevalence rates in sub-Saharan Africa, at 67% for all women (Zimbabwe National Statistics Agency and ICF International, 2016). However, there are important gaps in Zimbabwe's family planning program, particularly with respect to unmarried and adolescent women. Unmet need for unmarried women is twice as high (20%) as it is for married women (10%) and one-third of births are unintended in Zimbabwe (Zimbabwe National Statistics Agency and ICF International, 2016; Zimbabwe National Statistics Agency and ICF International, 2012). Adolescents have a much lower contraceptive prevalence rate (46%) and a higher level of unmet need (13%) than the general population. In addition, 22% of adolescents (ages 15-19) have begun childbearing (Zimbabwe National Statistics Agency and ICF International, 2016).

While the legal status of abortion in Zimbabwe is limited to circumstances of rape, incest, fetal impairment, or to save the woman's life, the Ministry of Health and Child Care (MoHCC) has addressed unsafe abortion, especially in regards to improving post-abortion care (PAC). In 2008, the MoHCC launched a training program to increase use of manual vacuum aspiration (MVA) in PAC and included misoprostol on the Essential Drugs List in 2011. Despite these growing government efforts to improve PAC in Zimbabwe, very little is known about abortion provision or complications of unsafe abortion. The only data come from a couple of small-scale hospital-based studies which are now at least a decade or more out of date (Mahomed et al., 1994; Mudokwenuy-Rawdon et al., 2005). Government, civil-society and private sector efforts to improve PAC is also being undermined by growing economic insecurity impacting the provision of care and clients' capacity to pay user fees.

With the high level of unintended births, a high maternal mortality rate, and gaps in the provision of adolescent sexual and reproductive health (SRH), unsafe abortion and PAC are critical issues to address. The aim of this paper is to estimate the national incidence of induced abortion in Zimbabwe and to provide new information on the context in which unsafe abortions are occurring. This study provides the first nationally-representative data on induced abortion in Zimbabwe, which has the potential to inform policy and programs addressing this issue.

Research Questions

This paper addresses four primary research questions:

- 1) What is the annual number of induced abortions (safe and unsafe), the abortion rate (the number of abortions per 1,000 women of reproductive age), and the abortion ratio (the number of abortions per 100 live births)?
- 2) What proportion of all pregnancies is unintended and what proportion of unintended pregnancies is resolved by abortion?
- 3) How many abortion complications resulting from unsafe abortion procedures are treated in facilities annually in the country as a whole, and what is the rate of hospitalized complications per 1,000 women of reproductive age?
- 4) How adequately equipped and capable are public and private health facilities to provide quality PAC treatment to women?

Methodology

It is extremely difficult to measure the incidence of induced abortion, particularly in settings such as Zimbabwe, where the practice is highly restricted and the vast majority of abortions are performed clandestinely. Official documentation on the numbers of abortions occurring annually does not exist. In direct interviews, women have an incentive to misreport their abortions due to stigma (Sedgh, 2012), or fear of punitive consequences (Gipson, 2011). Research on the incidence of induced abortion in restrictive settings is better off relying on indirect estimation methods.

The Abortion Incidence Complications Method (AICM) has been widely applied in over 25 countries worldwide: It is considered the best currently available method for measuring abortion in restrictive settings. The AICM includes two components: a Health Facility Survey (HFS) consisting of interviews with PAC service providers (n=245 public and private health facilities), and a Health Professionals Survey (HPS) with purposively-selected key informants from different regions of Zimbabwe who are knowledgeable about unsafe abortion and PAC-related issues (n=120).

For the HFS, one abortion care provider who is knowledgeable about PAC provision at the facility was selected for participation in the survey from each of the health facilities. This health provider was asked to provide estimates of the number of women who sought PAC during the month preceding the interview as well as the number of women who seek PAC in an average month. They were also asked detailed questions on the provision of PAC services and post-abortion family planning services at that facility.

For the HPS, each key informant was asked to provide estimates of the rate of complications among women who have unsafe abortions according to different types of providers, different types of abortion (surgical abortion, misoprostol, or other types), where they reside (urban/rural), and their wealth status (non-poor/poor), as well as the proportion who don't obtain medical care for complications they experience from unsafe abortion.

This study also includes a Prospective Morbidity Survey (PMS) to estimate the number of women treated for abortion complications and the severity of abortion-related morbidities. The facility-based PMS consists of prospective data collected from PAC patients over a four week study period. All women presenting at these facilities with any type of complications from abortion (miscarriages or induced abortion) during the study period were eligible to be interviewed. A questionnaire, administered to both patients and their providers, was used to capture a count of the number of women who came in for PAC as well as their demographic characteristics, reproductive history, presenting clinical signs and symptoms, and treatment protocol.

Sample Inclusion

The HFS and PMS surveys were conducted at facilities that have the capacity to provide PAC services. The Ministry of Health and Child Care, the Health Professions Authority, the Private Hospitals Association of Zimbabwe, the Association of Health Funders of Zimbabwe, and Population Services-Zimbabwe each provided a list of all known health facilities, including district, mission, provincial, central, and private hospitals, and NGO facilities. The combined list contained 2,141 facilities and provided information on the location, level of health facilities, and ownership type (public, or private). This list served as the basis for selecting the facilities included in the study. Specialized facilities unrelated to PAC were excluded (e.g., dental offices, prison clinics, podiatry clinics, pharmacies), as well as duplicate facilities, individual doctors, and facilities that lacked the capacity to provide PAC.

PAC capability was defined as a facility that either has an operating theatre or a facility where staff have been trained to use misoprostol for PAC. This definition includes all facilities greater than Level 1 facilities (primary health centers). According to the National Guidelines for Comprehensive Abortion Care in Zimbabwe, a Level 1 facility is only able to provide PAC using misoprostol, and only if they have staff who have received training to do so. In 2013, a MoHCC and Venture Strategies Innovations (VSI) operations research study provided such training on the use of misoprostol for PAC at 63 Level 1 facilities located in three provinces (Zimbabwe Ministry of Health and Child Care and Venture Strategies Innovations, 2013). All VSI Level 1 sites were included in the sample, while all other Level 1 facilities were excluded.

Based on the inclusion criteria, we identified 245 facilities in Zimbabwe with the capacity to provide PAC (Table 1). Given that a relatively small number of facilities were capable of providing PAC, they were likely to each account for a large share of cases. Therefore, 100% of the health facilities capable of providing PAC were included in the HFS.

Table 1: Facilities in Zimbabwe with PAC capability

Level	Ownership	Province										
		Bulawayo	Harare	Manicaland	Mashonaland Central	Mashonaland East	Mashonaland West	Masvingo	Matabeleland North	Matabeleland South	Midlands	TOTAL
Primary health centers (VSI sites)	Public			43					10	10		63
District/mission hospitals	Public			14	10	14	12	11	7	10	13	91
Provincial hospitals	Public			1	1	1	1	1	1	1	1	8
Central hospitals	Public	2	3									5
Private hospitals and clinics	Private or NGO	4	23	11	3	4	13	6	4	1	9	78
		6	26	69	14	19	26	18	22	22	23	245

The PMS was conducted at a nationally representative sample of the facilities selected to participate in the HFS. Facilities were stratified by level, ownership and province. All central hospitals (n=5), provincial hospitals (n=8), and higher-level private facilities (n=19) were included due to their anticipated large caseloads. Approximately 50% of lower level facilities were selected by province and level. The resulting PMS sample included 136 facilities.

For the HPS, a purposive list of 118 key informants across all 10 provinces of Zimbabwe who are knowledgeable about the conditions of abortion provision and PAC was produced. This list was created and vetted by members of the study team and included input from a study Advisory Committee and other experts on abortion in Zimbabwe. This list includes medical doctors, researchers, policy makers, advocates, traditional birth attendants, community health workers, traditional local leaders, patient advocates, social scientists, NGO staff (such as family planning program managers), and other individuals well-placed to know about women's behaviors and outcomes in seeking abortion. An effort was made to have sufficient representation of experts with knowledge of rural areas.

Fieldwork was conducted between July and October 2016.

Analysis

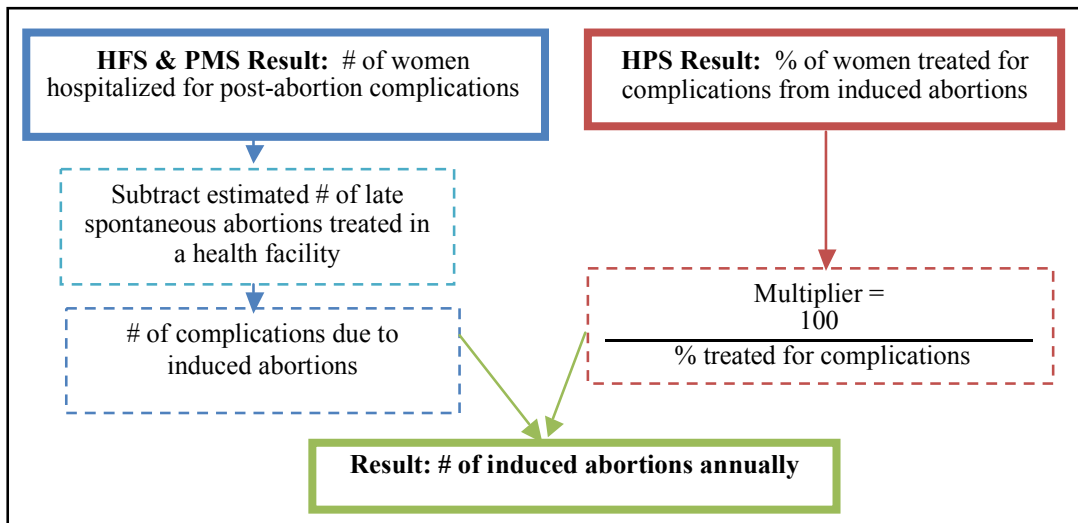
An indirect estimation technique (the Abortion Incidence Complications Methodology) will be applied to calculate the total number of induced abortions occurring in Zimbabwe (Figure 1). First, we will calculate the number of women treated for PAC in facilities using three data points per facility:

- 1) Number of women prospectively captured in a 4 week period seeking care for post-abortion complications (PMS)
- 2) Estimated number of women treated for post-abortion complications in a typical month (HFS)
- 3) Estimated number of women treated for post-abortion complications in the past month (HFS)

These numbers will be weighted and averaged to account for sampling proportions and non-response to provide national and regional estimates of the number of women who obtained PAC. We will then subtract the share of PAC cases treated for miscarriages using clinical data (Harlap et al, 1980), which will provide in the number of treated complications due to induced abortions in Zimbabwe in 2016.

Responses from the HPS will be used to calculate the estimated proportion of women undergoing an induced abortion that are likely to receive treatment for complications. The multiplier is the inverse of the proportion who seek care. This will be multiplied by the number of complications that are due to induced abortions, which results in the estimated number of women who obtained an induced abortion in Zimbabwe. Data from other sources, including the Census and the Demographic and Health Survey, will be used for inputs needed to estimate the national and regional indices (i.e. rates and proportion of unintended pregnancies).

Figure 1: Calculation of abortion incidence using HFS and HPS data



Preliminary Results

Results for this paper are forthcoming. The following results will be presented in answering the four primary research questions outlined above:

- (1) Table of number of abortions, abortion rate, and ratio
- (2) Figure of unintended pregnancy by outcome (induced abortion, miscarriages, and birth)
- (3) Table on abortion complications: proportion of abortions with complications and proportion of complications receiving treatment (estimated from the HPS); annual number of complications from unsafe abortions treated in facilities (HFS); rate of hospitalized complications per 1,000 women of reproductive age (HFS)
- (4) Table on PAC provision: method of evacuation, proportion of facilities with drug or equipment shortages, provision of post-abortion family planning services (methods provided to adolescent and non-adolescent women), and costs incurred by women obtaining care.

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