

Characteristics of Women Who Seek Induced Abortions in Developing Countries

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Abstract

In 2008, more than three-quarters of abortions occurring worldwide took place in developing countries. In the developing world, abortion incidence varies across subregions, due to differences in rates of unintended pregnancy, and in probabilities of terminating an unintended pregnancy. Our paper aims to understand the characteristics of women seeking induced abortions in developing countries. We use data from nationally representative surveys, national official statistics, studies of abortion patients, and other sources to examine whether abortion incidence varies by women's age, wealth, parity, education, and residence across 33 countries. Preliminary results based on evidence from official statistics and survey data indicate that a great deal of variation exists in the percentage distribution of abortions by sociodemographic statistics and across regions. These findings have implications for programs aimed at reducing the incidence and consequences of unintended pregnancy and unsafe abortion.

Introduction

Worldwide, an estimated 43.8 million abortions took place in 2008, with more than three-quarters of abortions occurring in developing countries.¹ In the developing world, abortion incidence varies widely across subregions. Even within countries, differences in abortion levels exist by population subgroups. Differential abortion levels may stem from variation in the levels of unintended pregnancies, and the probability that a woman with an unintended pregnancy will obtain an abortion. This paper aims to understand the characteristics of women seeking induced abortions in developing countries. Knowledge of the characteristics of women who choose to get abortions can shed light on which subgroups of women are especially in need of services to help reduce the incidence and consequences of unintended pregnancies and unsafe abortions.

Data and Methods

The present study uses data from a number of sources, including national statistics, nationally representative surveys, community surveys, and studies of abortion patients, to examine the characteristics of women seeking abortions. We use national statistics in countries where official abortion data exist. Only a few developing countries compile statistics on abortions performed, and even fewer provide information on the characteristics of women who obtain abortions. In the countries with restrictive abortion laws, the national statistics are limited to legal procedures. As a result, this analysis also utilizes data from nationally representative surveys such as Demographic and Health Surveys (DHS), Maternal Health Surveys (MHS), and Reproductive Health Surveys (RHS), each of which include abortion data on women of reproductive age. We also incorporate data collected from community-based surveys, which are similar to nationally representative surveys but are limited in scope to a cross-section of women from a particular region/province, city, or urban/rural area. Finally, we use data collected in studies of abortion patients. In countries where abortion is legal, these studies typically include women who go to a health facility to seek an abortion, whereas, in countries where the procedure is illegal or highly restricted, they focus on women seeking postabortion care.

Our study focuses on data collected between 2000 and 2014. We examine characteristics of women seeking induced abortion in developing countries in Africa, Asia, and Latin America and

the Caribbean (see Table 1 for a list of countries in this study). For national statistics and studies on abortion patients, we use data on abortions that occurred in the same year that the data were collected. For nationally representative surveys and community-based surveys, we use data on abortions that occurred in the three year period before the survey was conducted, unless otherwise specified. Because some of the characteristics we examine are only measured at the time of the survey, we focus on recent abortions for this study. This also minimizes the possibility that characteristics changed between the abortion and the time of the survey.

Our study examines three different measures of abortion: percentage distribution of abortions, abortion rate (number of abortions per 1000 women), and percentage of pregnancies ending in abortion. Pregnancies are comprised of all births, abortions, and miscarriages. Using findings from life tables and clinical studies, we estimate that the incidence of miscarriage equals 10% of abortions and 20% of births.

We study whether these measures vary by women’s sociodemographic characteristics, including age, wealth, marital status, parity, education, and residence. Unless otherwise noted, we examine characteristics at the time of abortion.

We expect some level of underreporting in all of the abortion data, thus the rates and percent of pregnancies that end in abortions will also represent underestimates of true incidence. If underreporting is not differential according to women’s characteristics, the percent distribution of abortions across characteristics will not be biased. However, these distributions may partly reflect the distribution of the underlying population of women of reproductive age.

Preliminary Results

Our preliminary results focus on the percentage distribution of abortions using official statistics from the Demographic Yearbook as well as survey data from nationally representative surveys, community-based surveys, and postabortion care patients.

In Table 2, we present the percentage distribution of abortions for women in Africa and Latin America and the Caribbean. In Africa, the highest proportion of abortions occurs among women who are young, wealthy, have secondary education, and live in urban areas. In Congo, Gabon,

and Ghana, more than half of all reported abortions occurred among married women while in Uganda, Kenya, and Nigeria, the majority of abortions occurred among unmarried women. Close to half of all reported abortions took place among women with two or more children. Nigeria is the only country where a high proportion of abortions (62%) occurred among women without children. While most abortions took place among women living in rural areas, this is not the case in Uganda and Kenya, where more than half of all abortions occurred among women living in rural areas.

In Latin America and the Caribbean, the highest proportion of abortions are observed among women who are young (Table 2). Among the countries for which we have data on parity, we find that abortions are roughly evenly distributed by parity, except in Haiti, where there is a slightly greater percentage of abortions among women with two or more children. Haiti is the only country with data on other sociodemographic characteristics. We observe that the distribution of abortions is highest among Haitian women who are wealthier, married, have primary or secondary education, and live in urban areas.

A greater amount of variation is observed in the distribution of abortions by women's sociodemographic characteristics in Asia than in the other two regions (Table 3). While there are many exceptions, the highest proportion of abortions generally occurs among women who are in their twenties and thirties, wealthier, have two or more children, have secondary education, and live in rural areas. In Armenia and Azerbaijan, we find that poorer women are more likely to have an abortion while abortions are evenly distributed by wealth status in Vietnam. In Nepal, Hong Kong, Israel, and Singapore, the highest proportions of abortions occur among women with no children. In most Asian countries, a higher proportion of abortions occur in rural areas; however, this is not the case in Armenia and Azerbaijan, where a greater proportion are reported in urban areas.

Next Steps

Our preliminary analyses reveal variation in the percentage distribution of abortions by a number of sociodemographic characteristics. We also observe variation in reasons across regions. As next steps, we plan to expand our analysis by calculating abortion rates and percentage of pregnancies ending in abortion and including more data from other developing countries. We

will organize the estimates according to the type of data source and expected quality of reported abortions or biases associated with each source; we will elaborate on the strengths and limitations of this study and the data on which it is based; and we will discuss the policy and programmatic implications of the findings.

Table 1. List of Countries by Region

| Africa | Asia | Latin America and the Caribbean |
|---------------------|-------------|--|
| Burkina Faso | Armenia | Bermuda |
| Congo (Brazzaville) | Azerbaijan | Costa Rica |
| Ethiopia | Bangladesh | Cuba |
| Gabon | China | Haiti |
| Ghana | Georgia | Mexico |
| Kenya | Hong Kong | Puerto Rico |
| South Africa | India | |
| Tanzania | Israel | |
| Uganda | Kyrgyzstan | |
| Zimbabwe | Nepal | |
| | Pakistan | |
| | South Korea | |
| | Singapore | |
| | Sri Lanka | |
| | Tajikistan | |
| | Turkey | |
| | Vietnam | |

Table 2. Percentage distribution of abortions, by women's characteristics, according to country and year, Africa and Latin America and the Caribbean

| | Africa | | | | | | Latin America and the Caribbean | | | | | |
|-----------------------------|--------------------------|--------------------------|--------------------------|---------------------------|--------------------------|----------------------------|---------------------------------|----------------------------|-------------------------------|-------------------------|---------------------------|---------------------------------|
| | <u>Congo^b</u> | <u>Gabon^b</u> | <u>Ghana^c</u> | <u>Uganda^d</u> | <u>Kenya^e</u> | <u>Nigeria^f</u> | <u>Haiti^b</u> | <u>Bermuda^g</u> | <u>Costa Rica^g</u> | <u>Cuba^g</u> | <u>Mexico^g</u> | <u>Puerto Rico^{gk}</u> |
| Data Source | DHS | DHS | DHS | PMS | PMS | CBS | DHS | DY | DY | DY | DY | DY |
| Year | 2012 | 2012 | 2007 | 2013 | 2012 | 2003 | 2012 | 2013 | 2009 | 2011 | 2012 | 2006 |
| Age | | | | | | | | | | | | |
| 15-19 | 20.3 | 19.5 | 23.7 | 27.7 | 25.1 | 24.8 | 13.4 | 6.2 | 16.4 | 25.3 | 17.0 | 17.6 |
| 20-24 | 33.2 | 30.7 | 33.0 | 30.9 | 30.8 | 35.7 | 28.9 | 27.6 | 83.6 ^h | 61.6 ^j | 19.6 | 34.0 |
| 25-29 | 23.5 | 23.3 | 19.9 | 23.4 | 21.9 | 20.6 | 23.7 | 28.0 | - | - | 21.9 | 25.7 |
| 30-34 | 13.0 | 15.4 | 12.0 | 10.2 | 11.7 | 9.4 | 15.2 | 21.8 | - | - | 21.5 | 14.0 |
| 35-39 | 7.8 | 7.5 | 8.9 | 5.3 | 7.9 | 4.3 | 13.2 | 12.4 | - | 13.1 | 16.7 | 6.4 |
| 40-44 | 2.0 | 3.1 | 1.9 | 2.1 | 2.5 | 4.2 | 5.0 | 4.0 | - | - | 3.3 | 2.3 |
| 45-49 | 0.3 | 0.5 | 0.7 | 0.5 | 0.2 | 1.0 | 0.5 | NA | 0.9 ⁱ | - | - | - |
| Wealth ^a | | | | | | | | | | | | |
| Lowest | 7.8 | 14.6 | 7.6 | - | - | - | 1.0 | | | | | |
| Second | 19.3 | 21.2 | 6.9 | - | - | - | 3.5 | | | | | |
| Middle | 22.5 | 21.4 | 20.2 | - | - | - | 15.1 | | | | | |
| Fourth | 25.7 | 22.5 | 30.0 | - | - | - | 35.3 | | | | | |
| Richest | 24.7 | 20.3 | 35.3 | - | - | - | 45.0 | | | | | |
| Marital Status ^a | | | | | | | | | | | | |
| Married | 56.9 | 56.1 | 51.4 | 38.4 | 37.3 | 26.2 | 69.0 | | | | | |
| Unmarried | 43.1 | 43.9 | 48.6 | 61.6 | 62.7 | 73.8 | 31.0 | | | | | |
| Parity | | | | | | | | | | | | |
| 0 | 21.8 | 24.8 | 41.2 | 44.5 | 42.1 | 62.6 | 29.2 | | | | 33.2 | 36.0 |
| 1 | 27.7 | 30.1 | 14.2 | 14.0 | 17.5 | 10.2 | 27.8 | | | | 29.6 | 29.6 |
| ≥2 | 50.5 | 45.0 | 44.6 | 41.5 | 40.4 | 27.2 | 43.0 | | | | 37.2 | 34.5 |
| Education ^a | | | | | | | | | | | | |
| None | 1.9 | 0.8 | 7.6 | 3.8 | 1.6 | 4.8 | 8.2 | | | | | |
| Primary | 23.3 | 17.1 | 22.1 | 30.7 | 38.4 | 13.8 | 35.4 | | | | | |
| Secondary | 70.8 | 73.7 | 67.9 | 45.0 | 45.2 | 51.6 | 50.6 | | | | | |

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|--------------------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|--------------|------------|-------------|
| Higher | 3.9 | 8.4 | 2.3 | 20.2 | 14.8 | 28.3 | 5.8 | | | | | |
| Residence ^a | | | | | | | | | | | | |
| Urban | 80.2 | 89.2 | 60.7 | 44.8 | 44.2 | 76.9 | 68.4 | | | | | |
| Rural | 19.8 | 10.8 | 39.3 | 55.2 | 55.8 | 23.1 | 31.6 | | | | | |
| Total (abortions) | 766 | 538 | 397 | 613 | 774 | 690 | 201 | 275 | 7780 | 82648 | 270 | 5496 |

Note: DHS = Demographic and Health Survey; PMS = Prospective Morbidity Survey; CBS = Community based survey; DY = Demographic Yearbook

^a Characteristic measured at the time of the survey.

^b Calculations based on the most recent abortion in the three year period before the survey.

^c Calculations based on abortions in the three year period before the survey

^d Calculations based on abortions reported at the time of the survey. Data were missing on parity for 3 individuals, on education for 2 individuals, and on residence for 5 individuals. Wealth data were not available.

^e Calculations based on abortions reported at the time of the survey. Data were missing on marital status for 1 individual, parity for 1 individual, education for 2 individuals, and residence for 2 individuals. Wealth data were not available.

^f Calculations based on abortions reported at the time of the survey. Data were missing on marital status for 4 individuals, parity for 2 individuals, education for 2 individuals, and residence for 3 individuals. Wealth data were not available.

^g Calculations based on abortions in the year of data collection.

^h Calculations based on women aged 20-44.

ⁱ Includes abortions to women aged 45+.

^j Includes women aged 20-34.

^k Parity calculations exclude 44 women with unknown ages.

Table 3. Percentage distribution of abortions, by women's characteristics, according to country and year, Asia

| | <u>Armenia^c</u> | <u>Azerbaijan^c</u> | <u>Bangladesh^b</u> | <u>Kyrgyz^c</u> | <u>Nepal^c</u> | <u>Pakistan^{c,d}</u> | <u>Tajikistan^c</u> | <u>Vietnam^c</u> | <u>Hong Kong^e</u> | <u>Georgia^e</u> | <u>Israel^e</u> | <u>Kyrgyzstan^e</u> | <u>Singapore^e</u> |
|------------------------|----------------------------|-------------------------------|-------------------------------|---------------------------|--------------------------|-------------------------------|-------------------------------|----------------------------|------------------------------|----------------------------|---------------------------|-------------------------------|------------------------------|
| Data Source | DHS | DHS | DHS | DHS | DHS | DHS | DHS | DHS | DY | DY | DY | DY | DY |
| Year | 2010 | 2006 | 2011 | 2012 | 2011 | 2012 | 2012 | 2002 | 2011 | 2011 | 2011 | 2008 | 2011 |
| Age | | | | | | | | | | | | | |
| 15-19 | 1.9 | 1.8 | 6.8 | 1.0 | 6.7 | 5.5 | 1.3 | 0.2 | 8.6 | 5.5 | 11.6 | 8.8 | 8.2 |
| 20-24 | 23.6 | 18.7 | 25.6 | 22.8 | 19.2 | 12.7 | 17.8 | 11.1 | 21.4 | 49.5 ^h | 20.8 | 24.3 | 23.4 |
| 25-29 | 37.0 | 27.9 | 28.3 | 34.5 | 33.9 | 33.0 | 26.9 | 29.3 | 21.7 | - | 20.5 | 26.4 | 25.7 |
| 30-34 | 23.5 | 26.0 | 21.7 | 21.0 | 25.5 | 30.9 | 21.9 | 22.9 | 19.8 | 28.1 | 19.9 | 22.2 | 21.3 |
| 35-39 | 8.6 | 17.6 | 13.2 | 13.5 | 11.8 | 11.2 | 23.3 | 24.0 | 18.8 | 12.9 | 18.4 | 13.4 | 15.9 |
| 40-44 | 4.6 | 7.0 | 3.9 | 7.1 | 2.1 | 6.5 | 7.3 | 11.1 | 9.6 | 4.0 ^g | 9.0 | 4.9 | 5.5 |
| 45-49 | 0.8 | 1.1 | 0.5 | 0.1 | 0.9 | 0.3 | 1.5 | 1.5 | - | - | - | - | - |
| Wealth ^a | | | | | | | | | | | | | |
| Lowest | 26.5 | 25.1 | 10.5 | 13.2 | 10.5 | 3.7 | 16.6 | 20.9 | | | | | |
| Second | 16.0 | 15.8 | 16.1 | 15.7 | 13.0 | 11.9 | 14.5 | 16.9 | | | | | |
| Middle | 26.4 | 22.8 | 16.9 | 14.6 | 16.5 | 17.2 | 17.6 | 22.9 | | | | | |
| Fourth | 15.2 | 18.0 | 22.2 | 29.9 | 22.7 | 27.7 | 25.0 | 22.1 | | | | | |
| Richest | 15.9 | 18.3 | 34.3 | 26.6 | 37.2 | 39.5 | 26.4 | 17.2 | | | | | |
| Parity | | | | | | | | | | | | | |
| 0 | 3.4 | 1.0 | 10.1 | 4.4 | 41.8 | 11.0 | 4.6 | 1.7 | 57.6 | | 45.1 | | 67.3 |
| 1 | 16.1 | 15.2 | 22.7 | 20.7 | 25.3 | 14.4 | 12.0 | 15.3 | 19.8 | | 13.5 | | 22.0 |
| ≥2 | 80.5 | 83.8 | 67.2 | 74.8 | 32.9 | 74.5 | 83.4 | 83.0 | 22.5 | | 41.4 | | 10.7 |
| Education ^a | | | | | | | | | | | | | |
| None | NA | 1.7 | 17.2 | 0.0 | 20.9 | 40.4 | 0.9 | 7.9 | | | | | |
| Primary | 6.6 | 0.4 | 24.6 | 0.0 | 26.2 | 24.5 | 1.7 | 21.0 | | | | | |
| Secondary | 43.0 | 89.7 | 48.0 | 51.0 | 43.9 | 26.4 | 82.0 | 68.9 | | | | | |
| Higher | 50.4 | 8.3 | 10.2 | 48.0 | 9.1 | 8.8 | 15.4 | 2.2 | | | | | |
| Residence | | | | | | | | | | | | | |
| Urban | 59.6 | 56.3 | 38.5 | 43.9 | 19.4 | 47.3 | 32.0 | 18.5 | | | | | |
| Rural | 40.4 | 43.7 | 61.5 | 56.1 | 80.6 | 52.7 | 68.0 | 81.5 | | | | | |
| Total (abortions) | | | | | | | | | | | | | |
| | 403 | 1533 | 1425 | 452 | 338 | 117 | 370 | 404 | 11,717 | 30,441 | 18,780 | 20,687 | 11,869 |

- ^a Characteristic measured at the time of the survey.
- ^b Calculations based on characteristics at the time of survey; menstrual regulation used as proxy for abortion .
- ^c Calculations based on abortions in the three year period before the survey.
- ^d Data on ever-married women only.
- ^e Calculations based on abortions in the year of data collection.
- ^f Calculations based on women aged 25+.
- ^g Calculations based on women aged 40+.
- ^h Calculations based on women aged 20-29.
- ⁱ Calculations based on women aged 20-34.
- ^j Calculations based on women aged 35-49.

References

- 1 Sedgh, G. *et al.* Induced abortion: incidence and trends worldwide from 1995 to 2008. *The Lancet*, 2012, 379(9816), 625-632.