

## **Characteristics of women who have induced abortions, type of providers used and the health consequences in Burkina Faso**

Idrissa Kabore, Institut Supérieur des Sciences de la Population  
Akinrinola Bankole, Guttmacher Institute  
Clementine Rossier, Institut National d'Études Démographiques  
Gilda Sedgh, Guttmacher Institute

### **Introduction**

Reducing maternal morbidity and mortality remains a challenge facing several developing countries, including Burkina Faso where there are 87,200 abortions, representing 25 abortions for every 1,000 women aged 15-49 (Sedgh et al, 2011). The majority of these abortions are clandestine and unsafe. The battle to reduce maternal morbidity and mortality in Burkina Faso as part of the MDGs must include effort to reduce unsafe abortion and promote access to safe, legal abortions.

Abortion is legal restricted in Burkina Faso and it is allowed only in cases of incest, rape, fetal defect or when the woman's life or physical health is endangered. However, while exceptions exist under these circumstances, in practice, legal abortions are rarely performed and illegal providers are rarely prosecuted. Yet, many abortions take place each year in the country as demonstrated by the above recent estimate. Previous work in Ouagadougou also showed that the abortion rate was high in the capital city, 40 per 1000 women of reproductive age. The study also showed that 60% of all abortions had negative consequences for the health of women and 14% of all abortion cases ended in health facilities for treatment of post abortion complications. The national study by Sedgh et al. also showed that 43-38% of all abortions in the country result in complications and 24-27 of all abortions are treated in health facilities. Undoubtedly, unsafe abortion has a clear implication for the countries level of morbidity and mortality. The impact on women and their households as well as the country's health system can also not be overemphasized.

The majority of what is known about abortion in Sub-Saharan Africa comes from hospital statistics on post abortion care. In Burkina Faso in the early 2000s, only four studies were on abortion. This work described post-abortion care in different hospitals in Ouagadougou and Bobo Dioulasso (Ky 1998; Tapsoba 1999; Ouattara 2003; Yameogo, 2003, CRESA, 1998). Post abortion care statistics can be used to shed lights on the clinical status of patients on admission, their demographic characteristics, type of care

provided, the treatment outcomes and cost of care. For example, a study based on data from Yalgado hospital showed that 71% of all cases hospitalized for post abortion care are due to induced abortion and 4-6% of hospital maternal deaths are related to complications of unsafe abortions (CRESA, 1998).

Studies of this type are crucial to improve the quality of care after abortion, but they are inadequate for understanding the number and characteristics of women who have abortions in the general population. Indeed, women who receive post-abortion care in hospitals represent a select group among all women who have abortions: their abortions resulted in complications and they were able to go to a hospital to receive care. For each of such women, another three women have had an abortion that either did not result in complications or that resulted in complications for which treatment was not sought in a health facility (Sedgh et al., 2011).

To address this gap by measuring the incidence of abortion and abortion related complications as well as the characteristics of women who have an abortion in a population, a new method called the Anonymous Third Party Reporting (ATPR) method otherwise known as the Confidante method was developed (Rossier et al. 2006). This method was first tested in Ouagadougou to produce an estimate of the incidence of abortions in the capital city. In a methodological study conducted in 2009, a revised version of the methodology was applied nationally along with another methodology called the Abortion Incidence Complication Method (AICM) to estimate the incidence of abortion in Burkina Faso. Although this method produced a less robust estimate of the national incidence of abortion than the AICM (Sedgh, et al., 2011), it obtained information on the characteristics of women who have abortions nationally that is not available from the other method. Also, evidence from the comparison of the two methods show that information obtained from this method on the conditions under which women have abortions and the health consequences of unsafe abortion is more reliable than corresponding information obtained from the other method (AICM). The purpose of the current paper is to examine the characteristics of women who have abortions in Burkina Faso, the type of providers they go to, the method used and the health consequences of unsafe abortion, using data collected from the ATPR method. The significance of the paper is that it will help policy makers and program planners to have better understanding of women who have abortions in the country and how the likelihood of having an abortion, the providers they go to and the used vary by sociodemographic sub-group. Additionally, the paper is important because is the first of its kind in the country as no national information currently exists on these subjects.

## **Source of Data and Method of Analysis**

Data for this paper come from a nationally representative community-based survey (CBS) we conducted in 2009 among women of reproductive age. The main goal of the survey is to collect information from women using the Anonymous Third Party Reporting (ATPR) method, to estimate the rate of abortion and abortion complications in Burkina Faso. The rationale behind this method is that while women may not want to report their own abortions in a community-based survey, they are more likely to be willing to report the abortions of their close associate. So, the method begins by asking respondents in a survey to provide a list of women of reproductive age who confide in them (i.e. women who belong to their social network). Then, each respondent is asked detail questions about each abortion that her confidantes have during a given period of time. This approach is comparable to the sisterhood method, used to estimate the rate of maternal mortality (Graham et al. 1989, Boerma and Mati, 1989) where respondents of a survey are asked to indicate whether their sisters are alive, and, where appropriate, to indicate the circumstances of their deaths. Four modules make up the questionnaire. The survey instrument involves four modules or sections:

Using the 2006 census as the sampling frame, we drew a nationally representative sample of women aged 15 to 49 for the survey. The sample was drawn to be representative of each of the 13 regions of Burkina Faso, and of the urban and rural population in the country. In each region and urban/rural stratum, census tracts were drawn randomly. Households within these census tracts were also selected randomly, and in each selected household, all women of reproductive age were eligible for the interview. Of the 4,538 eligible women in these households, 4,206 were successfully interviewed, for a response rate of 92.4%. Fieldwork was carried out between February and April 2009.

The questionnaire administered in the survey contained four sections. The first section collected information on respondents' social and demographic characteristics. The second section used a "network-generating question" to list and characterize all women aged 15–49 whom respondents say currently confide in them. This question was worded: "We would like to count all the women and girls who confide in you, who trust you, who share their secrets and problems with you in order to get your advice. We are interested in all women who confided in you during the preceding year, and who are aged between 15 to 49 years." Respondents were asked to indicate each confidante's relationship to the respondent (sister, friend, etc.), the duration of the relation of confidence, and the confidante's age, educational level, and main residence in each of the five past years. In a third section, respondents were asked whether their confidantes had had an induced abortion (with response categories of "yes," "no" and "do not know") in each of the five years preceding the survey. We ask the question only if the confidante was of reproductive age, living in Burkina Faso and confiding in the respondent at the time. The final section solicited information for each completed induced abortion, including the woman's parity, marital status and employment status at the time of the abortion; the type of abortion provider; the abortion technique used;

whether the woman suffered health complications from the abortion; whether she received post abortion care in a health facility; and, if so, in what type of facility.

The distribution of respondents in the survey was weighted to match the distribution of women in the 2006 census with respect to region and place of residence (urban or rural), and the distribution of confidantes was weighted to match that of the respondents with respect to region. It is not a problem if two or more respondents report an abortion obtained by the same confidante, because the confidante will appear in the numerator as well as the denominator of the estimated abortion rate each time her abortion is reported in the survey.

Although information on abortions to the confidantes was collected for the 5 years preceding the survey, for the purpose of this paper, we have limited the time frame for the abortion to the two years before the survey (2007 and 2008). Since the number of reported abortions tend to be smaller the further one goes back in years, we adopted this approach to reduce the problem of under-reporting of abortions associated largely with recall bias. Using Stata 11.0, we conducted bivariate analyses of the data to explore the characteristics of the confidantes' who have abortions, the type of providers they go to, the method used and the health consequences of unsafe abortion. Unless otherwise indicated, the characteristics of the confidantes included in this analysis were measured at the time of the abortion. We test the significance of associations between variables using the chi-square statistics.

## **Preliminary Results**

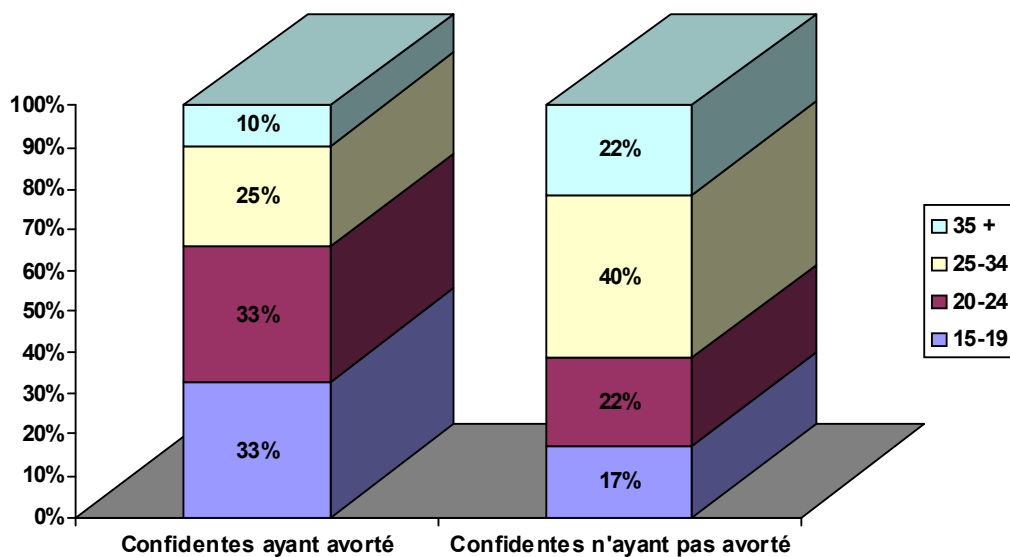
### *Characteristics of the confidantes according to recent abortion experience*

Over the two year period (2007-2008) under consideration in this paper, there were a total of 7,178 confidantes aged 15-49 reported by the respondents. These confidantes had a total of 249 abortions over the two year period. The study collected information on age, education and residence of the women who confide in the respondents, the relationship of these women to the respondents and the duration of their close association. Findings on these characteristics of the confidantes and their relationship to the respondents are presented in this section.

*Age:* Figure 1 shows the age distribution of the confidantes according to whether or not they had an abortion in the two years preceding the survey. As typical of the Sub-Saharan African countries, Burkinabe women who have a recent abortion experience are younger than those who do not. For example, while 66% of the confidantes who had an abortion in the past two years were under age 25 years, the correspondent

proportion among those who did not have a recent abortion experience is only 39%. As indicated in Table 1 this association is statistically significant at 1% level.

Figure 1: The association between confidantes' age and recent abortion experience



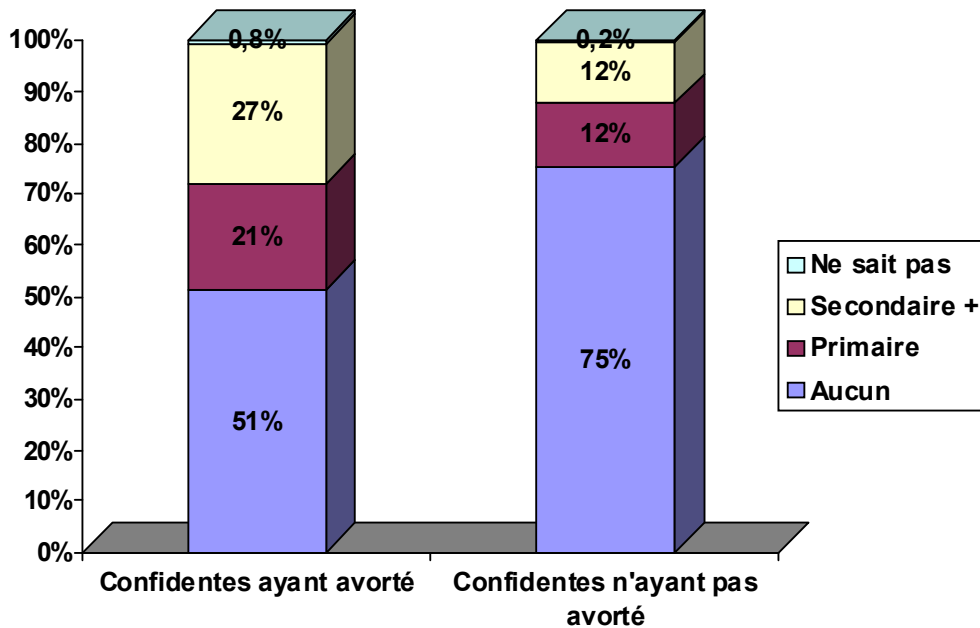
Among the two groups of women, the age distribution of those who did not have a recent abortion experience is closer to the age structure of the female population (INSD, RGPH 2006). There are more adults aged 25 and older. In sum abortion is more common among young people.

*Residence:* Burkinabes live predominantly in rural areas. Therefore, at least 6 in 10 of both groups of confidantes reside in rural areas. However, women with recent abortion experience are more likely to be urban residents than their counterparts who did not: 36% versus 23% (Table 1). The association is significant at 1% level. This finding is not surprising since urban residents have better access to services, are more likely to be able to pay and may be more liberal regarding obtaining an abortion.

*Education Level:* Education is generally limited in Burkina Faso, and the vast majority of women of reproductive age have no former education (JFK RGPH2006). Nevertheless, education is still significantly positively associated with abortion in the country (Figure 2 and Table 1). Twenty-seven percent of women who have recent abortion experience

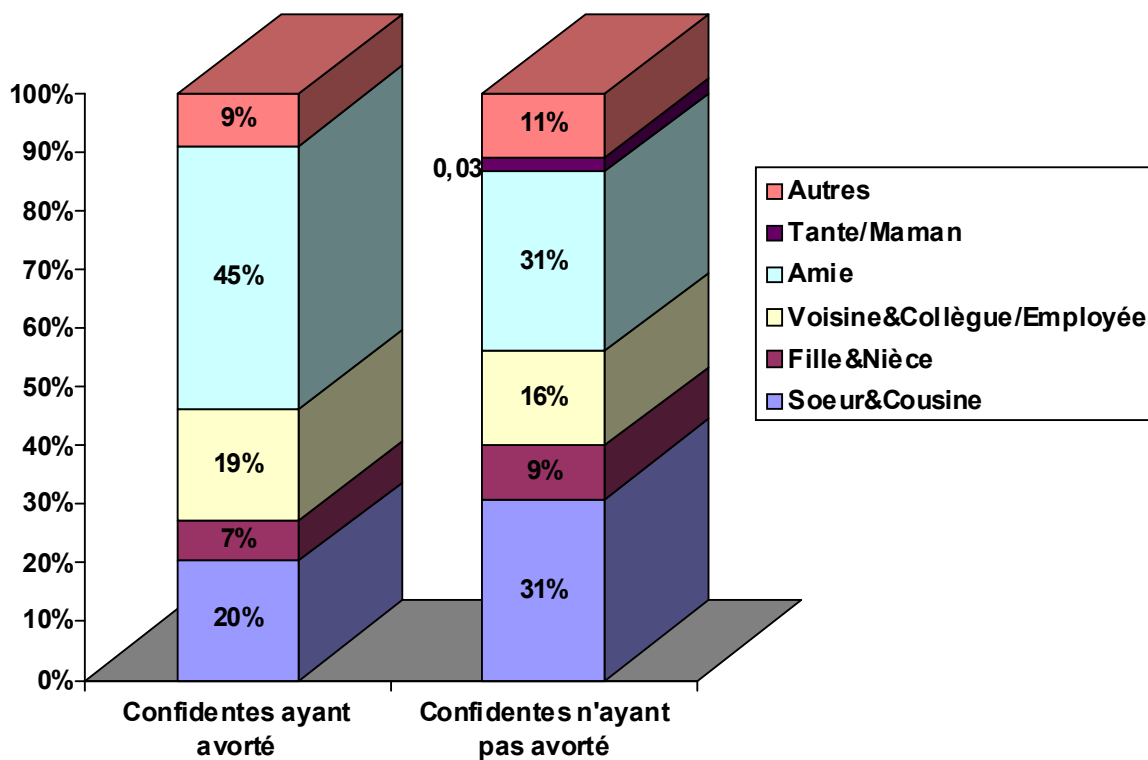
had secondary or more education compared to only 12% of women who did not. Similarly, while 20% of women who had an abortion in the last two years had a primary education, only 12% of their counterparts who did not have a recent abortion had a primary education. In other words, those who have experienced a recent abortion are more likely to have been at school (48% compared to 25%).

Figure 2: The association between confidantes' education and abortion experience



*Confidentes' relationship to the respondents:* The distribution of the nature of relationship of the confidantes to the respondents according to recent abortion experience is presented in Figure 3 and Table. The highest proportion (45%) of women who have a recent abortion experience are friends of the respondents followed by sisters/cousins and employers/colleagues (19-20%). On the other hand, among confidantes who did not have a recent abortion experience, sister/cousin and friend tie as the most common relationship (31%) to the respondents. These are followed by neighbor/colleague/employer. Thus, while friends and sister/cousin are the two most common relationships between the confidantes and the respondents, confidantes with abortion experience are less likely to be relatives of the respondents than those who did not have a recent abortion experience.

*Duration of the relationship:* How long the confidantes and the respondents have been in the close relationship is presented in Table 1. Most of the confidantes have been in this relationship with the respondents for more than 1 year. This proportion is 90% among women who have a recent abortion experience compared to 91% among those who did not have a recent abortion. However, in general, women who did not have a recent abortion experience tend to have been in this relationship with the respondent longer than their counterparts who had a recent abortion. Among the former, 63% have been in this relationship with the respondent compared to only 44% among the later.



### Further analysis (to come)

*Correlates of induced abortion experience:* The foregoing analysis compares the characteristics of women who had recent induced abortions with those of women who did not have and shows that those who had recent abortion experiences are significantly different from those who did not and that the later are more like the general population of women of reproductive age than the former. Subsequent analysis (to come) will focus on women who had recent abortion experiences with a view to exploring the relative importance of the sociodemographic characteristics in predisposing women to having an abortion. In a multivariate analysis, we will examine the “net effects” of women’s age, residence parity, education and marital status on the

likelihood of a woman having an abortion in the two years prior to the survey in Burkina Faso. Three of these covariates, age, residence and parity were measured at the time of the abortion. Although the other two, education and marital status, measure current status, we do not think they will be different from the women's status on these variables at the time of the abortion since we are limiting the analysis to abortions that occurred in the last two years.

*Abortion care providers, abortion related complication and treatment:* We will explore how women's characteristics relate to the type of providers they seek abortions from, whether or not they experience complications and whether or not they seek treatment if they experienced complications. Thirty-six percent of all women who had induced abortions during the five years prior to the survey went to traditional providers, 29% went to health providers and 29% did something themselves to procure the abortion (Table 2). Almost half of the women who had an abortion had complications associated with the abortion and among these women, 54% reported that they obtained treatment from a health facility (Table 2). Limiting the abortion experiences to those that took place in the two years prior to the survey and using a multivariate statistical method, we will examine the relationships between women's characteristics and the likelihood that they will go to a health provider for an abortion, they will have an abortion related complication and they will receive treatment for the complications.

## **Implications**

Given the paucity of data on induced abortion in Burkina Faso, this paper will provide pertinent information that will help answer important questions such as who are the women who have abortions in Burkina Faso and how are they different from the general population of women of reproductive age? What is the abortion seeking behavior of these women in terms who they go to for the abortion and what are the health consequences of unsafe abortion in the country? Answers to these questions will provide policy makers and program planners needed information to help them put in place adequate policies and programs to help reduce unsafe abortion and its health consequences, including maternal death. This information will help to fill gaps and promote efforts to move the country towards achieving the MDG 5.



**Table 1. Distribution of the characteristics of all confidantes according to whether or not they had an abortion: CBS 2009**

Characteristics	Had an abortion in the two years before the survey		Chi-square Significance
	Yes	No	
Age			***
15-19	32.9	17.1	
20-24	32.9	21.6	
25-34	24.7	39.6	
35 +	9.5	21.7	
Résidence			
Urban	36.4	22.6	***
Rural	63.6	77.4	
Education			***
None	51.4	75.1	
Primary	20.6	12.3	
Secondary +	27.2	12.4	
Unknown	0.8	0.2	
Relationship to the respondent			***
Sister/cousin	20.2	31.0	
Daughter/niece	7.0	8.9	
Neighbor/colleague/employer	19.0	16.1	
Friend	45.0	30.6	
Mother/aunt		2.5	
Others	8.7	10.9	
Duration of the relationship			
0-1	9.5	8.7	***
2-4	46.1	28.2	
5 +	44.4	63.1	

Total	100.0	100.0
Number of cases	221	6 957

**Table 2: Distribution of women who obtained abortions by type of abortion provider, whether women had a complication and whether care was received in a health facility**

<b>Condition of abortion</b>	<b>%</b>
<b>Type of provider</b>	
Traditional provider	35.9
Woman herelf	29.2
Health provider	28.9
Unknown	6.0
Percent	100.0
Total (N)	387
<b>Had complications following the abortion</b>	
No	50.6
Yes	47.0
Unknown	2.4
Percent	100.0
Total (N)	387
<b>Received medical care for abortion complications</b>	
No	43.4
Yes	54.1
Unknown	2.6
Percent	187
Total (N)	100.0