

## CHAPTER 7

# Measuring Abortion with the Anonymous Third Party Reporting Method

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The three most obvious actors involved in a clandestine abortion are the abortion seeker (the woman or the couple), the provider of the illegal abortion (for abortions that are not self-induced) and the provider of legal postabortion care (in the case of complications that require treatment in a hospital). All the direct data-collection methods described in this manual rely on one of these three actors. Each is a direct witness to the practice of abortion, and thus is uniquely qualified to report on it. But how complete is the information collected through surveys with these “direct witnesses?” To assess the validity of data from each of these actors, we need to answer the two following questions. First, is the actor necessarily involved in all abortions and, if not, in what proportion? Second, if the actor is interviewed, how willing is he or she to talk about abortion?

As shown in Table 1, (see table at the end of the chapter), the answers to these two questions depend on the legal context of the procedure. Where abortion is legal, or illegal but tolerated, abortion providers are the most complete source of information on the practice of abortion. In settings where it is illegal, not openly tolerated and socially stigmatized, none of the first three actors offers complete information on abortion; in fact, women and providers may be very reluctant to offer *any* information about induced abortions in such contexts.

In this chapter, we present an original method of collecting abortion data, the Anonymous Third Party Reporting (ATPR) method, which uses information from a fourth actor, the abortion seeker’s confidants (see bottom panel of Table 1). Because close friends or relatives are often asked to help in the search for illegal abortion providers, these individuals are almost always involved in the process in settings where providers are underground and difficult to access. Also, anonymously reporting others’ abortions is much less stigmatized than is reporting one’s own. This fourth actor and source of information thus may yield relatively *complete* information on abortion in the very settings where data on induced abortion is the most difficult to collect—in countries where access to abortion services is highly restricted and the procedure is practiced clandestinely as a result.

### Goal of the Method and Indicators

The goal of the ATPR method is to collect quantitative data on induced abortion in countries where access to abortion services is highly restricted and the practice is clandestine. The method yields data on the incidence of abortion, the social and demographic characteristics of women who resort to abortion (age, educational level, employment, parity, marital status, residence, etc.), and the characteristics of the procedures they obtain (who provides them, the abortion technique used, the rate of postabortion complications and care, etc.). In other words, the method allows us to “collect” abortion statistics in countries where the practice is illegal.\* It also produces information on the profile of women who receive postabortion care in hospitals and on the “multiplier,” or proportion of all abortions that hospitalized cases represent, which postabortion cases need to be inflated by to obtain the total number of abortions.

The indicators that the method can provide are:

- annual abortion rate per 1,000 women aged 15–49 in the geographical area under study and by region, place of residence (urban/rural) and age;
- total abortion rate (the number of abortions women will have over their lifetime, assuming that current rates persist);
- the percentage distribution of abortions by women’s characteristics (educational status, employment, parity, marital status), by type of provider and by abortion technique;
- the proportion of abortions that result in complications;
- the proportion of abortions with complications that are treated in a health facility; and
- the percentage distribution of postabortion cases by characteristics of the woman, abortion provider and abortion technique used.

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\*The exception is data on gestational age, which are difficult to collect with the ATPR method because only providers can accurately report on this variable.

One could mistakenly think that even more information could be collected using the ATPR method—such as data on whether the male partner knew about the abortion, who made the decision to have it and the costs involved—but since the ATPR method is based on survey respondents' reports on abortions in their social networks, we recommend that its use be restricted to constructing only the simplest indicators of abortion practices, such as those listed above.

Also, since retrospective reporting of third parties' abortions are highly susceptible to recall bias, indicators should be computed from information on recent abortions only. Ideally, one would use data collected on abortions that occurred during the year preceding the survey. In order to increase the number of abortion cases without increasing the number of women in the sample, data can also be collected on abortions that occurred during several years preceding the survey. In that case, the quality of each year's input data has to be checked.

## Background

The ATPR method, also known as the confidants' method, was developed during a five-month stay in a village in Burkina Faso in 2000. In an exploratory study, participant observation, an anthropological method, was used to gather information on illegal abortions. Conversations with key informants revealed that villagers were unwilling to talk about their own abortions, in both informal conversations and structured interviews. Yet villagers were surprisingly well-informed about—and willing to talk about—the abortions of others. This situation has four main explanations (Rossier 2002), namely:

1. In rural Burkina Faso, abortion providers do not operate openly. Villagers know that abortion services exist, but they do not know who performs abortions. In other words, abortion services are clandestine and individuals are unable to access them directly.

2. Finding an abortion provider thus constitutes a major problem for women or couples who want to interrupt an unwanted pregnancy. They first approach their social network of close friends or relatives (confidants) for help in locating and accessing abortion services. These friends or relatives then search within their own social networks for someone who had an abortion in the recent past who would be able to introduce others to that provider.

3. Individuals who help abortion seekers locate abortion services are bound to secrecy either by the links of kinship or friendship (when the relationship is characterized by mutual trust) or by the bond of shared transgression.

4. Often abortion seekers request an abortion from someone known to be a provider only to be told that no such service exists. Indeed, to protect themselves, providers may only accept clients who are recommended by

someone they already know (typically a former client).

A qualitative investigation involving 30 interviews in 2001 in Ouagadougou, the capital of Burkina Faso, confirmed these findings (Rossier et al. 2006). Respondents were willing to talk about the abortions of their friends or relatives (and a few were willing to talk about their own). In almost all reported abortions, friends or close relatives were asked to help locate an abortion provider; the few exceptions were abortion seekers whose friend or close relative was an actual provider.

The current situation in Burkina Faso is strikingly similar to the abortion situation in the United States during the 1960s. Howell (1969) described the "search for an (illegal) abortionist" using similar language—that is, women or couples who wanted an abortion started their search by talking to their closest friends or relatives, who themselves searched among their own circles for someone who recently had an abortion and could recommend an address. The way that information about abortion circulates in Burkina Faso (a secret ultimately known by a lot of people) is also well explained by existing sociological theories of secrets (Rossier 2007a). Thus, abortion seekers probably rely on their close friends or relatives (that is, their confidants) to locate illegal abortion providers in *all settings where abortion services are underground*.

Shortly after the Ouagadougou study, Elul (2004) applied the ATPR method in the state of Rajasthan, India. In that study, self-reports yielded a higher number of abortions than the third party method did, which suggests that the ATPR method is less successful in settings where abortion is legal and services are relatively accessible, as is the case in India. In such settings, women and couples who want to terminate a pregnancy do not have to ask friends or relatives for help in locating abortion services. However, the application in Rajasthan yielded an encouraging result for the method: Respondents' attitudes toward abortion were not linked to their probability of reporting a third party's abortion. In other words, since respondents with liberal abortion attitudes were as likely to report others' abortions as were respondents with restrictive attitudes, the fear of social stigma does not appear to have influenced the reporting of third party abortions.

## Description of the Method

### Step I. Sampling

The first step to implementing the ATPR method is to draw a representative sample of women\* of reproductive age (15–49). The size of this first sample depends on

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\*In our first application of the method, we experimented with an initial sample of men. However, since we found men to be somewhat less knowledgeable than women about abortions in their female social networks (see text for more details), we recommend that the method be used with initial samples of women.

the expected size of the social network sample (see Step II, section 2) and on the expected annual rate of induced abortion in the social network sample.

## Step II. Survey Instrument

The questionnaire that implements the ATPR method is short and made up of the following four sections.

### Section 1

This opening section collects respondents' social and demographic characteristics. The section should use wording similar to that used in another source (such as a Demographic and Health Survey, or DHS) so the responses can be compared with other results to assess the representativeness of the first sample.

### Section 2

This section uses a "network-generating question" to list and characterize all women aged 15–49 whom respondents say currently confide in them. We thus use the first sample to create a second one. The network-generating question can be worded as follows: "We want to know about the women who currently share their secrets with you, discuss their intimate lives with you, who confide in you." The notion of "confidence" is key, since abortion seekers first turn for help to their confidants—that is, to the persons they trust most and who keep their secrets.

Applying the ATPR method requires clearly distinguishing between individuals on the giving and receiving ends of a confidence, as we are interested in reports by respondents of women who confide in *them*. For example, let us imagine that individual X confides her secrets to individuals A and B; A and B are her confidants. However, A and B do not confide in X; but X receives the confidences of Y and Z; in other words, X is the confidant of Y and Z. Here, we are interested in listing Y and Z who, if they had had an abortion, have likely talked to X about it. We are not interested in A and B, whom X does not know intimately (they do not confide in her). It is possible (although optional) to start Section 2 with a question about the respondent's own confidants. Indeed, when people are asked about individuals in their immediate social circle, they spontaneously talk about the people *they* confide in (that is, their own confidants). Once they list these individuals, respondents may then more accurately list people who confide in them (the people for whom they are confidants), which is the population that interests us.

A small qualitative investigation may be necessary to determine how to express the idea of "confidence" in the local language(s). It is better to not mention "secrets regarding reproductive matters" or "intimate issues such as abortion" in the network-generating question, since

this specific wording may introduce biases in the social network sample. Indeed, knowing that the interviewer is interested in abortions, respondents may mention all distant relatives or acquaintances that they know to have had an abortion, even if those individuals are not particularly close to the respondent. In that case, the sample of network members would lose some representativeness and be biased toward women who have had abortions, and thus overestimate the incidence of abortion. Note that the network-generating question targets only *women of reproductive age*, since only women at risk for unintended pregnancy have abortions. We also ask only about women who are *currently* confiding in the respondents to minimize recall bias and collect data on the most recent abortions possible.

To maximize the number of women in the network sample, the questionnaire could ask respondents for the number of women who confide in them according to each type of relationship. For instance, the item could be worded "Among your sisters, how many confide in you?" or "Among your coworkers, how many confide in you?" etc.

In a second step, we attribute a number to each woman who is cited as a confidant and ask about the following characteristics: relationship to the respondent (sister, friend, etc.) and duration of her status as confidant, age, educational level, current residence and main residence in the past few years (e.g., one, two, three, etc.). To be able to weight the second sample, which is biased toward women who themselves have several confidants, we also ask how many women other than the respondent the confidant is close to (see Step III below for more details).

### Section 3

In a third section, we ask whether each of the respondent's confidants had had an induced abortion (with response categories of "yes," "no" and "do not know") in a given time period preceding the survey (one year or longer depending on the period of interest). We ask the question only if the confidant was of reproductive age at the time, lived in the area of interest and had confided in the respondent. It is very important to probe the respondent for each positive ("yes? are you sure?") or negative ("no? are you sure?") answer. If there is any hesitation, the answer should be classified as "do not know" to maximize the accuracy of the data collected.

### Section 4

In this final section, we ask whether each reported abortion terminated a pregnancy or if it resulted in an incomplete abortion attempt. Although we clearly ask about induced abortions in Section 3, some respondents may misunderstand this term, and report their relatives *spontaneously*

taneous abortions; thus, an additional question can check whether the reported abortion is indeed induced and not spontaneous. For each completed induced abortion, we collect the following information: 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 postabortion care in a health facility; and, if yes, in what type of facility. We also ask whether any confidants of the woman other than the respondent knew about the abortion. (Since we already asked about the woman's total number of female confidants, we can ask here whether all, some or none of her confidants know about the abortion.) This question is used to investigate possible bias introduced by some abortions being more well-known than others in a given social network (see Step III for more details).

#### *Optional Sections*

These four questionnaire sections are sufficient to apply the ATPR method. Respondents can also be asked about their own abortions in an additional section (to be placed, for example, after Section 4) to compare results from applying the ATPR method to self-reports of abortions. Another optional section can measure respondents' attitudes toward abortion to confirm that, all else being equal, respondents with negative attitudes toward abortion are no more likely than others to underreport their friends' or relatives' abortions. One possibility here is to adapt the abortion attitude scales that were developed for research on abortion in the United States and Europe. Respondents could be asked whether they think abortion is acceptable in a range of situations, such as when the woman's life is endangered by the pregnancy, in the case of rape or incest, in the case of fetal malformation, when the partner does not want the child, in the case of difficult economic circumstances or in other situations more specific to the context under study (Rossier 2007b). Other more simple questions are possible such as "Are you in favor of legalizing abortion?" A section assessing attitudes toward abortion is best placed at the end of the questionnaire to avoid asking respondents to expose possible negative attitudes before asking them to report on their close friends' or relatives' abortions or their own.

#### **Step III. Data Analysis**

Data analysis is then performed in the following eight steps.

1. Ensure that the first sample of women of reproductive age is representative by comparing the respondents' social and demographic characteristics to similar data (such as results from the most recent DHS).

2. Count the number of women aged 15–49 currently confiding in the respondent. Compare their characteristics to those of the first sample; the two samples may be different, since women who have an especially wide social circle (i.e., a high number of confidants) are more likely to be captured by the network-generator question. Note that having social capital (or large social networks) is usually linked to having socioeconomic resources and that outmigration from an area typically reduces the size of social networks, at least temporarily. If necessary, weight the second sample with the inverse of the variable "number of other women the friend/relative confides in," and check that the representativeness of the second sample is improved by the use of this weight.

3. Calculate the number of "person-years" among the respondent's confidants to calculate the denominator for abortion rates (by study year, age, rural or urban area of residence, etc.). We know the length of time in which the friend/relative has been confiding in the respondent; when the duration of that confidence is shorter than the period targeted by the denominator, eliminate all person-years during which the friend/relative was not yet confiding in the respondent. Also, eliminate all person-years that are not in the designated reproductive age-range or that were lived outside the place of interest. Further, eliminate the person-years during which the respondent did not know whether the friend/relative had had an abortion.

4. Count the number of abortions occurring during the selected person-years. Eliminate all unsuccessful abortion attempts and spontaneous abortions, in case there are any. Compute the ratios of abortions to person-years to obtain abortion rates. Several options are possible, depending on how we treat person-years for which we have no information (i.e., we can assume that no abortions take place during those person-years or we can assume that abortions occur at the same rate as with person-years for which we do have information).

5. Verify that recall bias does not unduly influence abortion rates as could happen with rates decreasing markedly the further back in time the multiyear data go. Also verify whether the abortion rate among social network members with more confidants is similar to that among those with fewer confidants. If the two variables are related, weight the second sample with the answers to the question "number of other women the person confides in" before computing the abortion rates. (The weight should be inversely proportional to the number of confidants.)

6. Compute the percentage distributions of abortions and of women who obtain them by characteristic; compute the rates of complications and of hospitalizations. Note that the inverse of the hospitalization rate is

the “multiplier” by which hospital records of postabortion patients should be multiplied to obtain the total number of abortions in the population. Several versions of these calculations are possible depending on how we treat abortion cases for which we lack complications data.

7. Check how characteristics of abortions (technique used, type of provider, whether complications developed and where they were treated) and of the women having them (age, marital status, parity, employment, education, residence) vary by the number of confidants who know about the abortion. If certain abortions are known to a greater number of confidants than others (for example, abortions that ended in serious complications that required hospitalization), which is not our assumption, the ATPR method will underestimate the overall abortion rate and overestimate the complication and hospitalization rates.

8. Project the number and characteristics of abortion patients who are hospitalized for treatment of complications in the study area by collecting from other sources the number of women aged 15–49 in the area, then multiply that number by the annual abortion rate and apply the hospitalization rate to the estimated number of abortions. Compare this result to facility-based postabortion care statistics, if available; the two sources should correspond. Note, however, that even if this tells us that the ATPR method was successful in collecting representative data on induced abortions that led to hospitalizations, it tells us nothing about those cases that did not receive or require facility-based postabortion care.

An optional step of the analysis, should the data be available, is to verify whether respondents’ attitudes toward abortion affect their likelihood of reporting others’ abortions (everything else being constant). We hypothesize that these two variables are independent, since respondents’ have no reason to fear being stigmatized themselves by reporting the abortions of others.

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\*The questionnaire used in our application of the ATPR method had a number of shortcomings and limitations. First, it specified having had an induced abortion as an example of the type of “secret” confidants could share with respondents. Second, the questionnaire failed to collect data to estimate and/or correct for the two possible sources of bias of the method: the number of women other than the respondent whom the friend/relative confides in and the number of confidants other than the respondent who were informed about the abortion. Moreover, the instrument did not collect data on the confidants’ educational level, parity, marital status and employment at the time of the abortion. Finally, although the questionnaire did ask about respondents’ attitudes toward abortion and used those responses to compute a tolerance scale (Rossier 2007b), we did not check whether reports of third parties’ abortions were independent of respondents’ abortion attitudes.

## An Application of the Method

We administered the four-section questionnaire outlined above\* to a representative sample of men and women living in Ouagadougou, Burkina Faso, in November 2001. We adopted a two-stage cluster sampling procedure, which was cheaper to use than a one-stage cluster or a random sample because the only available sampling list was a list of census tracks dating from the last census. Using citywide data from the 1996 census that were updated for non-zoned areas, we randomly drew 57 census tracks weighted by their population. We then enumerated the population in the selected census tracks and randomly drew households weighted by their size. All women aged 15–49 were interviewed in the selected households. To assure confidentiality, we avoided collecting identifying information on the respondents’ friends or relatives, and referred to them by numbers throughout the questionnaire.

A separate sample of households was constituted to draw a sample of males; all men aged 15 and older were interviewed in the selected households. Overall, 82% of the selected women and 84% of the selected men completed the questionnaire, which yielded sample sizes of 963 women and 417 men, respectively. Weights were calculated for each individual to render the two samples representative of women and men of reproductive age in Ouagadougou.

Earlier that year, during the summer of 2001, we performed an inventory of public and private health centers in Ouagadougou to be able to cross-check the data obtained through the ATPR method. We selected all health facilities that were equipped to treat severe abortion complications; five facilities met our criteria. (These facilities are referred to later in the text as the five “referral centers.”) We prospectively recorded all postabortion care patients admitted to these centers’ obstetrics and gynecology wards from September through December 2001. Altogether, there were 464 admissions for postabortion care during the four-month study period.

We compared male and female respondents’ reports of abortions among women in their social networks. There was no difference by respondents’ sex in whether younger friends or relatives had confided in them about an abortion, but men were less likely than women to know about the abortions of older friends or relatives. This finding is likely explained by older women’s greater autonomy and resources, which makes them less likely to ask for help from male friends or relatives. Male respondents also estimated higher complication rates and proportions of abortions performed by health workers than did female respondents. Since men in general were less likely than women to be involved in the abortion process (e.g., the

male respondents in our sample usually knew only about their friends' or family's most difficult abortion cases), we used data from female respondents only to generate our estimates.

Altogether, the original sample of 963 women reported 1,150 close female confidants whose age range was similar to their own. We calculated the denominator for the abortion rate by counting the number of close friends or relatives who were exposed to the risk of abortion in each year from 1997 through 2001. Confidants were considered at risk if they were aged 15–49, lived in Ouagadougou and had a close relationship with the respondent at the time. The numerator was calculated as the number of reported abortions in each year of exposure to the risk of induced abortion (1997, 1998, 1999, 2000 and 2001). Over all person-years of exposure, respondents knew that a confidant had had an abortion in 4% and that they did not have one in 88%; respondents lacked sufficient information for the remaining 8% of person-years of exposure. Respondents were better informed about their confidants' abortion experiences for the later years of the study period (i.e., confidants' abortion experience was unknown for 4% of person-years in 2000 and 2001, compared with 12% for 1997–1999).

Assuming that no abortions occurred during the "unknown" person-years (other less-conservative assumptions are possible), the annual abortion rate was 41 abortions per 1,000 women aged 15–49. The abortion rate increased between 1997 and 1999, and remained stable between 1999 and 2001. However, the total abortion rate, an indicator that controls for the age-structure of the population of confidants, was found to be stable between 1997 and 2001. Adolescents had the highest annual abortion rate of any age-group: Each year, 61 of every 1,000 women aged 15–19 had an induced abortion.\*

In total, respondents reported 168 induced abortions among their friends or relatives. Respondents knew who provided their confidants' abortions in 86% of reported cases (143/168).<sup>†</sup> According to provider-type data, health workers (or people posing as health workers to abortion seekers) induced 61% of all abortions in Ouagadougou, women themselves self-induced 26% of the reported abortions and traditional healers performed the remaining 13%. Respondents knew the specific abortion technique used in about half (56%) of their confidants' abortions (96/168). Among those abortions in Ouagadougou for which the method was known, the most common tech-

nique was by injection (one abortion in three), followed by dilation and curettage (one abortion in five) and overdoses of household drugs (one abortion in eight).

The complication status (whether the respondent thinks her confidant experienced a negative health outcome) is known for 84% of the abortions reported in respondents' social network (145/168). We calculated a complication rate of 60% (87/145). Among women who experienced negative health outcomes, 45% received no medical care, 31% received postabortion care in one of the city's secondary health centers and 24% were treated in one of the five referral centers included in the study. Overall, 33% of the induced abortions ended up in a secondary health center of Ouagadougou and 14% were treated in one of the five referral centers. Admissions for complications from induced abortion in these five centers should therefore be multiplied by 7.0 (the inverse of 14%) to obtain the total number of abortions at the city level.

We projected the annual number of induced abortions in Ouagadougou by applying the age-specific rates of induced abortion that were estimated from the social network data to the city's female population. The result is 7,764 induced abortions. We then applied the complication rate estimated from the same data (60%) to yield 4,645 induced abortions requiring care every year in Ouagadougou. Applying the hospitalization rate (14.3%) to the same 7,764 induced abortions, we projected that 1,112 induced abortions were treated annually for complications in Ouagadougou's five referral centers (or 929 abortions instead, assuming that all abortions for which respondents did not know if their friend/relative received postabortion care were uncomplicated procedures).

The data we assembled on postabortion care provided in the five referral centers from September through December 2001 as a cross-check to the ATPR data indicated some 464 admissions for care of complications from miscarriages and induced abortions. We applied the WHO protocol (Figa-Talamanca et al. 1986) by asking a number of questions whose responses were then organized as denoting possible, probable and certain induced abortions using the following criteria: Possible induced abortions were cases involving unplanned pregnancies; probable induced abortions included cases with severe complications; and certain induced abortions were those for which the patient or her family admitted that the abortion was induced and for which the patient showed evident signs of an induced abortion (e.g., an object was inserted into the vagina).

All together, 71% of the cases, or 328 cases over the four-month period, were classified as induced (possibly, probably or certainly) abortions. We then multiplied that value by three to generate the number of hospital-

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\*No confidence intervals were calculated, so we are unable to report whether differences in abortion rates by age are statistically significant.

<sup>†</sup>The percentages mentioned in the body of the text are weighted, but the Ns presented in parentheses are unweighted.

ized induced abortion cases in the city over a full year. We conclude that each year, the five referral centers of Ouagadougou admit 984 patients with complications from induced abortions (and 408 patients with complications from spontaneous abortions), a figure that is very close to the estimate yielded by the ATPR method.

## Strengths and Limitations of the Method

### Validity Checks

The measures produced by the ATPR method can be subjected to a series of internal validations, including the following.

- The representativeness of the first sample (social and demographic characteristics) can be assessed by comparison with external data.
- The representativeness of the second sample (social and demographic characteristics) can be assessed by comparison with the first sample. In particular, women who confide in many friends/relatives are likely to be overrepresented in the second sample; if these women have different social and demographic characteristics than other women, the second sample can be corrected by weighting it with the inverse of the network members' number of confidants.
- We can check whether women with more confidants are more likely to resort to abortion than other women (which is possible in a context where access to abortion services depends on social capital). If the two variables are related, we can correct for this bias by weighting the second sample with the network members' number of confidants (if not already done).
- We can check whether stigma influences the reporting of third parties' abortions by relating respondents' attitudes toward abortion to their probability of reporting social network members' abortions. (We assume that there is no relation between these variables, since only women who actually have an abortion are stigmatized, not individuals who report on the abortions of others.)
- We can check whether the characteristics of a reported abortion are related to the number of confidants who know about it. (We assume these variables to be unrelated, since our qualitative data showed that almost all abortions, no matter how they are obtained, are reported to confidants in settings where social networks are key to finding abortion providers; if women or couples have difficulty finding an effective abortion provider [or method] or experience complications, they inform people outside their close social circle.)

Note that the two earlier applications of the ATPR method—in the capital of Burkina Faso, Ouagadougou (Rossier et al. 2006) and in the state of Rajasthan, India (Elul 2004)—have run only a few of these validity checks. A new test of the ATPR method to measure abortion at the national level in Burkina Faso is currently underway. That test should allow us to perform a greater number of validity checks.

### Potential Biases

Counterintuitively, the inherent possibility that the abortions of women who confide in several respondents would be double-counted is not a problem because such double-counting would apply equally to the numerator and the denominator, which does not change the estimates, as statisticians know well.

The most obvious bias is introduced by respondents not knowing about all the abortions among women who confide in them. Even in contexts where access to abortion services is very underground, some women may obtain an abortion without the help of their close friends or relatives (for example, by going directly to a provider or by asking a person known to have had an abortion). Alternatively, women may select different confidants to confide different secrets. In both cases, the method will underestimate the abortion rate.

If some abortions (i.e., the ones with the most serious complications) are more likely to be known than others, the method will not only underestimate the abortion rate but overestimate the proportion that result in complications and are treated in facilities. We can check for this kind of bias by examining abortions by the number of confidants who know about them (but we cannot correct for this bias if it is present).

The ATPR method will also underestimate the abortion rate if respondents are reluctant to report on third parties' abortions; we can check for this bias by relating respondents' abortion attitudes to their probability of reporting confidants' abortions (but we cannot correct for this bias if it is present).

On the other hand, the method will overestimate the abortion rate if women who have more confidants are more likely to have abortions than are other women, which is possible in contexts where access to abortion services depends on one's social network. However, we can check and correct for this bias with the question on network members' total number of confidants.

Another potential problem of the method is its inability to capture the abortions of women who die from their complications. The only way around this problem would be to have a network-generator question that asks respondents about women who had confided in them in the past (for example, one year ago). Respondents would then be

asked to record all abortions and deaths among those past confidants during that time. But the sample size necessary to capture maternal mortality due to abortion using such a question would have to be very large.

### Logistical and Feasibility Considerations

The cost and time frame for implementing the ATPR method is the same as that for any survey using a representative sample of reproductive-age women. Since the ATPR questionnaire is short, it can be inserted into an existing reproductive health survey, which would lower its administrative costs even further. It is preferable to work with a staff of female fieldworkers, whose training should address and deal with their possible negative attitudes toward abortions. Training also needs to focus on ethical issues and on confidentiality issues in particular. The ATPR questionnaire is otherwise easy to administer, since respondents usually like to talk about members of their social network.

However, three key issues need to be resolved before applying the ATPR method in a given context. First, to determine whether use of the method is even relevant, a small qualitative study should be conducted to determine whether abortion services are underground (i.e., difficult to access) and whether abortion seekers rely on confidants to locate providers. Second, if the government enforces a highly restrictive abortion law, the ATPR method is not applicable for ethical reasons, since authorities may use the results to prosecute women or providers. Finally, in countries where abortion is illegal although rarely prosecuted, the application of the method will need the same authorization as any other reproductive health survey; it can thus be presented as such or, in some settings, as a specific survey of the practice of abortion.

## REFERENCES

- Elul B, Anonymous third party reporting of induced abortion: an experiment in Rajasthan, India, paper presented at the annual meeting of the Population Association of America, Boston, Apr. 1–3, 2004.
- Figa-Talamanca I et al., Illegal abortion: an attempt to assess its cost to the health services and its incidence in the community, *International Journal of Health Services*, 1986, 16(3):375–389.
- Howell N, *The Search for an Abortifacient*, Chicago: University of Chicago Press, 1969.
- Rossier C, Measure and meaning of induced abortion in rural Burkina Faso, unpublished dissertation, Berkeley, CA, USA: Department of Demography, University of California, 2002.
- Rossier C et al., Estimating clandestine abortion with the confidants method: results from Ouagadougou, Burkina Faso, *Social Science & Medicine*, 2006, 62(1):254–266.
- Rossier C, Abortion: an open secret? abortion and social network involvement in Burkina Faso, *Reproductive Health Matters*, 2007a, 15(30):230–238.
- Rossier C, Attitudes towards abortion and contraception in rural and urban Burkina Faso, *Demographic Research*, 2007b, 17(2):23–58.

**TABLE 1. Actors involved in obtaining an induced abortion and the completeness of the information they provide**

Actors in abortions	Is this actor involved in all abortions?	Level of willingness to report abortions	Level of completeness of information on abortions
DIRECT WITNESSES			
Abortion seekers	Yes	Low where abortion is highly stigmatized; medium where abortion is legal or tolerated	Low where abortion is highly stigmatized; medium where abortion is legal or tolerated
Abortion providers (illegal or legal)	Yes, except with self-induced abortions where abortion is illegal; yes where abortion is legal and medicalized	Very low where abortion is illegal and not tolerated; high where abortion is legal	Very low where abortion is illegal and not tolerated; very high where abortion is legal
Postabortion care providers (legal)	No; only involved in abortions with complications	High	Low; only involved in abortions with complications
INDIRECT WITNESSES			
Abortion seekers' confidants	Depends on confidants' involvement in the abortion process; can be high	High	Depends on confidants' involvement in the abortion process; can be high