

The Incidence of Induced Abortion in Nigeria

By Stanley K. Henshaw, Susheela Singh, Boniface A. Oye-Adeniran, Isaac F. Adewole, Ngozi Iwere and Yvette P. Cuca

Context: Although abortion is illegal in Nigeria except to save the life of the woman, thousands of women resort to it each year. Information on the incidence of abortion and on the consequences of abortion outside the health care system is needed to develop policies and programs that will address the problem.

Methods: Experienced physicians conducted interviews at a nationally representative sample of 672 health facilities in Nigeria that were considered potential providers of abortions or of treatment for abortion complications. The data were used to estimate the annual number of abortions and to describe the provision of abortion-related services.

Results: Each year, Nigerian women obtain approximately 610,000 abortions, a rate of 25 abortions per 1,000 women aged 15–44. The rate is much lower in the poor, rural regions of northern Nigeria than in the more economically developed southern regions. An estimated 40% of abortions are performed by physicians in established health facilities, while the rest are performed by nonphysician providers. Of all hospitals and clinics that provide abortions, 87% are privately owned, and abortions are provided by nonspecialist general practitioners at 73%. Three-quarters of physician providers use manual vacuum aspiration to perform abortions, and 51% of providers who treat abortion complications use this method. Physician respondents believe that the main methods used by nurses, midwives and other nonphysicians to induce abortions are dilation and curettage, hormonal or synthetic drugs and insertion of solid or sharp objects.

Conclusions: Although highly restricted, abortions take place in large numbers in Nigeria, under both safe and unsafe conditions. Policies to improve access to contraceptive services would reduce unplanned pregnancy and abortion and, along with greater access to safe abortion, would help preserve the health and lives of Nigerian women.

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In Nigeria, as in all parts of the world, women experience pregnancies that are unplanned. Some of these women seek to terminate their pregnancies—by safe, medical methods if possible, but often by whatever means are available. The practice of abortion is by no means a new phenomenon in Nigeria, although the main reasons women seek abortion may be changing. Increasingly, women seeking abortion stress their desire to avoid premarital births and to control family size, while de-emphasizing more traditional

*In Nigeria, abortion is legally restricted under both the Penal Code, which is generally applied in the northern states, and the Criminal Code, which is applied in the southern states. Both codes provide for similar criminal penalties for performance of an abortion.

†In this article, the term abortion refers to induced abortion, and miscarriage refers to spontaneous abortion.

reasons such as spacing births to protect infant health and appearing to adhere to the social norm that they should abstain from intercourse while breastfeeding.¹

Nigerian law makes it a crime to perform or to obtain an abortion except to save a woman's life.* Penalties exist for any person who performs an abortion, as well as for any woman who seeks an abortion or who attempts to cause her own miscarriage.² Nevertheless, women in Nigeria obtain abortions, many from physicians providing the service in private clinics and hospitals.³ Still, unsafe methods of abortion continue to be used widely, resulting in severe health consequences for women.⁴ Maternal mortality is estimated at 1,000 maternal deaths per 100,000 live births in Nigeria, while an estimated one in eight maternal deaths in

West Africa are attributed to abortion.⁵

There are no measures of the nationwide incidence of induced abortion in Nigeria. Yet, the incidence of abortion is an important indicator of the availability and use of contraceptive services, and measuring the extent of abortion-related care is essential to quantifying and comparing the social and health implications of induced abortion relative to other health or service needs.

The principal goal of this article is to estimate the current level of abortion in Nigeria,[†] including both the number of abortions performed by physicians in private clinics and hospitals and the number performed by nonphysician practitioners and by women themselves.

A secondary goal is to produce a comprehensive profile of the provision of abortion services in the country as a whole. This includes providing up-to-date national information about who is performing abortions, the methods used, the number of abortion complications treated at medical facilities, who is treating these complications and at what types of facilities, and the medical procedures and care that are provided to women obtaining abortions and to those seeking postabortion services.

A further aim is to estimate and describe the provision of abortion in each of the four major regions of Nigeria—the Southeast, Southwest, Northwest and North-

Stanley K. Henshaw is deputy director of research, Susheela Singh is director of research and Yvette P. Cuca is research associate, The Alan Guttmacher Institute, New York; Boniface A. Oye-Adeniran, Isaac F. Adewole and Ngozi Iwere are coordinators, Campaign Against Unwanted Pregnancy, Lagos, Nigeria. The authors would like to thank the team of physicians who conducted the interviews in Nigeria. They also acknowledge Paulina Makinwa-Adebusoye for her assistance with developing the sampling frame, Suzette Audam for data management and programming, and Roberta Scheinmann and Gilda Sedgh for research assistance. This research was supported by the John D. and Catherine T. MacArthur Foundation. The findings and conclusions are those of the authors and do not necessarily represent the views of the MacArthur Foundation.

east. (These regions correspond to the four health zones defined by the Nigerian government.) The four regions have roughly equal populations, ranging from 20.8 million in the Northwest to 23.7 million in the Northeast.⁶ The largely rural and impoverished northern states are predominantly Muslim, while the southern states, which are more economically developed, are largely Christian. In addition, the number of health facilities is greatest in the south, especially the Southwest, where Lagos, a metropolitan area of about nine million inhabitants, is located.⁷

Regional information is crucial, given the extremely large socioeconomic and cultural differences that exist between regions in education, urban growth, economic conditions, cultural practices and religion. These differences are likely to be associated with women's fertility desires, may also affect the availability of and access to health care services, and can influence both the extent to which women seek abortion and the conditions under which the procedure is obtained.

Data and Methods

Sample Design

The difficulties of obtaining accurate information on the sensitive subject of abortion are widely acknowledged and are especially severe in countries like Nigeria, where the procedure is legally restricted and where official statistics on abortion are not collected. In such contexts, population surveys of women usually do not obtain reliable data on abortion because many women are unwilling to report on the subject. An alternative approach for obtaining abortion data of reasonable quality is to survey a representative sample of health facilities where abortion is provided and a sample of those where complications from abortions performed outside the health care system are treated. The facility-based estimate of the number of abortions provided by physicians can then be combined with an estimate of the likely number of abortions performed by nonphysicians, projected from the data regarding the number of complications treated in health facilities.

Using this approach, we conducted a national random sample survey of all health establishments in Nigeria where abortions might be performed or where abortion complications might be treated. The sample included both publicly and privately owned facilities, and ranged from individual doctors' private practices to the largest public hospitals.

Nigeria has a public health care system that includes federal, state and commu-

nity hospitals, clinics and health centers. In addition, a large component of health care is provided in private fee-for-service centers that usually have patient beds and are often referred to as clinics or hospitals. Therefore, no clear distinction exists in the private sector between physician practices, clinics and hospitals.

We determined that a minimum sample size of 100 facilities providing abortions and 100 facilities treating complications was large enough to support a reasonably accurate estimate of the total number of induced abortions obtained by women in various circumstances. From the experience of two of the study's authors in practicing obstetrics and gynecology in Nigeria, we knew that a large majority of public and mission hospitals (those run by religious missions) treat complications from abortion and miscarriage. We therefore designed the sample to yield at least 100 completed interviews with these types of establishments. Based on a study in two Nigerian states indicating that about one-third of private physician practices perform induced abortions,⁸ we set a minimum goal of 300 interviews in private clinics and hospitals, in order to obtain interviews for at least 100 facilities that provide induced abortion.

To identify the facilities, we used what are generally accepted as the most complete lists of health care providers available: the 1991 National Survey of Health Manpower and Facilities in Nigeria, which was conducted by the Federal Office of Statistics (FOS) (with support from the Federal Ministry of Health) and which lists facilities ranging from large hospitals to small health posts and dispensaries; and the National Medical Directory (a publication of the Nigerian Medical Association), which lists officially registered health establishments. For most of the sites, the lists contained information about facility ownership (e.g., public, private, mission), the type of facility (e.g., clinic, comprehensive health center) and the number of beds.

We used all private nonmission establishments in the sampling frame, and included public and mission facilities if, given the available information about the typical patient mix of that type of facility, we expected that at least one-quarter of the sites would treat some complications of abortion procedures. By this criterion, all comprehensive health centers and medical centers were included, as were all hospitals except for those specializing in the treatment of infectious diseases and leprosy. Facilities listed as either mater-

nities or maternity homes or nursing homes were included if they were operated by state governments or missions.

We excluded public maternity homes and nursing homes if they were units of local or community governments, as well as public clinics, primary health centers, dispensaries and health posts. More often than not, these sites have no physicians, and they usually refer women with abortion complications to hospitals. Also excluded were industrial, military and combination public-private facilities (which are few in number), because they are known to have a low probability of treating women with abortion complications. The above criteria resulted in the exclusion of about one-quarter of the facilities on the FOS list.

Our survey complemented a parallel survey that was fielded at about the same time in Edo and Lagos states by three of the authors under the auspices of the Nigerian Campaign Against Unwanted Pregnancy (CAUP), which is affiliated with the Nigerian Medical Association. The CAUP survey used questions equivalent to ours to obtain the information needed for estimating the level of abortion, but it elicited less detail on the treatment of abortion complications. To avoid duplication of interviews, we excluded these two states from our sample, and the CAUP survey results were combined with our survey results for the analyses presented here.

After exclusions, our list of Nigerian health establishments contained a total of 3,962 names and addresses from the FOS list and 1,816 sites from the supplementary list based on the National Medical Directory. We used a systematic sample with a random start, stratified by number of beds (fewer than 100 vs. 100 or more beds) for public facilities. We sampled from the two lists separately and then eliminated all facilities sampled from the supplementary list that were also listed on the FOS list. This left us with a random sample of facilities on the FOS list plus a random sample of facilities unique to the supplementary list. The Federal Capital Territory and all 28 states other than Lagos and Edo in existence at the time were represented in the sample.*

To reach our targeted number of interviews, we needed to select a larger sample to allow for incorrect addresses, facilities that no longer existed, an interviewer's inability to reach a facility or gain access to an eligible respondent and respondents' refusals.

*Since the sample was drawn, the Nigerian government has reorganized the country into 36 states plus the Federal Capital Territory.

On this basis, and given the total number of facilities of each type listed, we selected from each of our two lists every sixth private establishment, one of every 3.9 public establishments with 100 or more beds, and one of every 8.7 public establishments with fewer than 100 beds or with an unknown number of beds. In addition, we selected all teaching hospitals. The resulting sample consisted of 602 private and 139 public establishments, plus 16 teaching hospitals.

In the course of our survey, we encountered a private hospital that reported performing a very large number of abortions. If other large providers with similar caseloads existed in other parts of the country and our random sample happened to miss these sites, our national projection would underestimate the number of abortions. However, if they happened to fall into the sample in disproportionate numbers, our projection would be an overestimate. Because of the importance of correctly representing large facilities that are few in number, we compiled a list of medical facilities in each state which were reputed to provide the largest number of abortions in the state. After eliminating from consideration the facilities that had already been interviewed, we selected two at random from each of the 26 states for inclusion in the large provider survey. Ultimately, 50 of these known large providers were interviewed.

Questionnaire

We believed that most physicians in Nigeria would agree to participate and would provide reasonably accurate information about their abortion practice in a survey interview, for several reasons: It is well known that physicians often provide abortions; two of the study's authors are physicians who are recognized and respected in the medical community in Nigeria; the research effort was endorsed by the Nigerian Medical Association and the Association of General and Private Medical Practitioners of Nigeria; and the interviews were carried out by respondents' fellow physicians.

*Providers were asked about the procedures for uterine evacuation. Interviews did not address treatment for other possible abortion complications, such as sepsis or perforations.

†These groups were selected because they captured the important differences in response rates without involving small cell sizes.

‡For data from Lagos, the weight for all facilities was the product of 4.33 (the inverse of the proportion of registered health establishments surveyed) and 1.5 (to compensate for facilities judged missing from our sample list, based on the investigator's estimate). For data from Edo, the weight was 1.2, since all listed establishments were surveyed, and approximately one-sixth of existing sites were missing from the sampling list.

The interview was designed to obtain the number of abortions provided in health facilities by trained doctors and other medical professionals and the number of women treated for induced abortion complications, which would be used as the basis for estimating the number of induced abortions performed by providers other than physicians. It included questions on the characteristics of the facility and whether they provide abortions, treat complications of abortions performed elsewhere or treat complications due to miscarriages. Many facilities provide abortions and treat complications and therefore all were asked about both types of services.

At facilities where abortions are performed, respondents were asked about the number of abortions performed, the type of physician who performs the abortions, the procedures used, the use of anesthesia, the maximum gestational age at which the procedure is performed, the cost of the procedure and the provision of contraceptive counseling and services.

At facilities where complications are treated, respondents were asked about the number of women treated for miscarriages, the number treated for abortion complications, the type of medical procedure used to treat these complications,* the proportion of women treated as inpatients and outpatients, and whether contraceptive counseling and services are routinely offered to patients treated for abortion complications and miscarriage. Respondents at these sites were also asked their perceptions about which types of providers most commonly perform the abortions that result in complications, the methods that are used by nonphysician providers to induce abortion, the methods that are used by women who induce abortions themselves, and the provider's estimate of the proportion of women with medical complications who are likely to receive treatment in a medical facility.

Fieldwork

The survey was fielded by CAUP. Experienced physicians, many of them obstetrician-gynecologists, were trained to conduct the interviews. In most cases, the interviewers were residents of the states where they were assigned. The interviews were conducted with the senior physician responsible for obstetric and gynecologic care at the sampled facility. This individual was often the owner or medical director of the establishment or, in public facilities, the director or chief of obstetrics and gynecology.

The interviews took place from May 1996

through October 1997. Of the 741 facilities sampled from the master lists, 14% had closed or had incorrect addresses, and 1% proved to be laboratories, pharmacies or other ineligible locations. Of the remaining 627 facilities, 1% refused to participate and 24% were not contacted because interviewers were unable to complete their assignments due to other obligations or because of difficulty reaching some facilities in rural areas. Facilities that were not contacted were distributed across all categories of size and type of ownership, but the proportion not contacted was higher among private facilities than among public establishments, and among smaller than among larger sites. The survey had an overall completion rate of 75%—73% in the Southeast, 72% in the Southwest, 83% in the Northwest and 77% in the Northeast.

Usable interviews were obtained from 468 of the facilities sampled from the master lists, from 14 teaching hospitals and from 50 of the recognized large abortion providers. Including the 140 CAUP interviews completed at facilities in Lagos and Edo states, three of which were teaching hospitals, interviews from a total of 672 facilities were available for analysis.

The low refusal rate indicates that little selection bias was introduced from that source. Nonetheless, bias could arise if the facilities not contacted were disproportionately located in remote areas that were difficult for the interviewers to reach. In addition, item response bias could have been introduced if some respondents were reluctant to report fully the number of induced abortions they performed. In some instances, the interviewers had information from other informed sources indicating that induced abortions were being denied or underreported.

Weighting

The data were weighted to project the results nationally. For the original sample, the first weighting factor compensated for the missing interviews (refusals and those not contacted). It was calculated separately for the 12 subgroups created by the three facility types (public, private from the FOS sample and private from the National Medical Directory sample) in each of four regions.† The second weighting factor was the inverse of the sampling ratio; for example, since one in six private facilities were sampled, the weighting factor was six for private facilities. For respondents in Lagos and Edo, weights were applied based on the investigators' estimate of the proportion of actual facilities surveyed.‡

For the sample of recognized large abor-

tion providers, the weight was calculated as the number of establishments on the list of these providers in the state divided by the number interviewed in that state. However, for facilities included on both this list and the lists from which the original sample was drawn, the weights were reduced by a correction factor to take into account the two ways the facilities could have been sampled. All teaching hospitals were given a weight of one, since all were included in the sample, and all but two were interviewed.

Estimates of Abortion Incidence

The national incidence of induced abortion was estimated by summing the number of abortions performed by physicians in clinics and hospitals and the number performed outside the health care system by nonphysicians. The latter figure was estimated based on the number of abortion complications treated in health facilities, assessments of the percentage of nonphysician abortions that are likely to result in health complications requiring medical treatment, and provider assessments of the percentage of women with abortion complications who actually receive medical treatment.

Abortions by Physicians

Respondents were asked whether their facility terminated unwanted pregnancies and, if so, how many had been terminated per month during the past six months and how many in the past four weeks. We based our estimates of the number of abortions performed annually on the number reported for the past four weeks, because these numbers were likely to be remembered more accurately. On average, the number reported for the last four weeks was smaller than the number reported per month during the past six months; thus, our choice led to conservative estimates.

Of the 672 facilities, 225 performed abortions (Table 1). National projections indicate that the mean number of abortions provided annually per facility was 186. However, this national average reflects the presence, particularly in the more developed southern regions of the country, of sites that perform large numbers of procedures: Approximately 135 establishments each perform more than 500 abortions a year; 85% of these are in the south (not shown). Facilities in the northern regions, on the other hand, averaged about 140 procedures annually.

The median number of abortions provided annually per facility in Nigeria is 52, indicating that many physician providers perform only about one abortion a week.

Table 1. Survey data on the number of facilities and national projections of the number of abortions provided or treated, by region, Nigeria, 1996

Data and projections	Total	Southeast	Southwest	Northwest	Northeast
SURVEY DATA					
(N=672) (N=216) (N=273) (N=97) (N=86)					
Facilities interviewed					
Providing abortions	225	40	121	34	30
Treating complications	529	147	225	84	73
NATIONAL PROJECTIONS					
Annual procedures per site					
Abortions	186	300	164	142	143
Abortion complications treated	48	44	51	30	74
Facilities					
Providing abortions	1,320	270	700	190	160
Treating abortion complications	3,030	1,030	1,280	430	290
Abortions					
Performed by physicians	245,000	80,000	114,000	27,000	23,000
Performed by nonphysicians*					
Minimum estimate†	183,000	57,000	83,000	14,000	29,000
Best estimate‡	366,000	113,000	165,000	29,000	58,000
Total no. of abortions					
Minimum estimate	428,000	137,000	197,000	42,000	52,000
Best estimate	610,000	193,000	279,000	56,000	82,000
Rate per 1,000 women aged 15–44					
Minimum estimate	18	23	33	7	8
Best estimate	25	32	46	10	13
Ratio per 100 pregnancies§					
Minimum estimate	9	11	17	3	4
Best estimate	12	15	23	4	6
Ratio per 100 live births					
Minimum estimate	10	13	21	3	4
Best estimate	14	18	30	4	7

*Estimate of the number of nonphysician abortions excludes complications attributable to physician abortions (8.8% of physician abortions) and assumes that 34% of all nonphysician abortion complications are not treated by physicians. †Minimum estimate assumes that all nonphysician abortions result in complications. ‡Best estimate assumes that half of nonphysician abortions result in complications. §Pregnancies include only births and abortions; miscarriages are excluded. Sources: Population (for rates)—United Nations (UN), *The Sex and Age Distribution of the World Populations, The 1996 Revision*, New York: UN, 1996, p. 637. Regional populations were calculated based upon distributions from results of the 1991 FOS census. Live births (for ratios)—Calculated from 1993 birthrate (UN, 1995 *Demographic Yearbook*, New York: UN, 1995, Table 9, p. 322) and population of 111 million. Regional distribution of births was based upon distributions of populations.

Fourteen percent had performed none in the four weeks prior to interview, although they had performed some in the previous six months (not shown). National projections indicate that physicians in approximately 1,300 hospitals and clinics terminate some 245,000 pregnancies annually.

Abortions by Nonphysicians

Estimating the number of abortions performed by all nonphysician providers (including those performed by women themselves) required four steps. First we had to create estimates of the number of women treated for complications of induced abortion. Nearly 75% of the health facilities surveyed—a total of 529 facilities—treated complications from miscarriages, induced abortions or both. Projecting this figure nationally indicates that nearly 3,600 facilities throughout Nigeria treat complications from abortions, miscarriages or both.

Respondents at facilities that treated abortion complications were asked to estimate separately the number of women treated for complications from abortion and the number treated for miscarriages.* Estimates from the hospitals and clinics surveyed indicate that of those treating

any type of complication, about 3,040 facilities nationally treat some 142,000 women experiencing complications from induced abortions and about 3,180 treat nearly 139,000 women with complications from miscarriages annually. On average, each site treats relatively few of these cases—about 48 cases of abortion complications and 44 miscarriages a year. This is not unexpected, since many of the surveyed facilities are private practices, often with only one general practitioner who treats a wide variety of medical problems.

Second, we obtained the number of complications resulting only from nonphysician abortions by subtracting from the reported number of complications treated those that resulted from abortions performed by physicians, since these cases were already counted as abortions provided by private clinics and hospitals. According to a recent household survey of more than 3,700 women in Edo and Lagos,

*It is often difficult to distinguish between the complications resulting from an abortion and those resulting from a miscarriage. Therefore, it is possible that some providers wrongly assumed that complications resulted from an induced procedure rather than a miscarriage, while others might have judged induced procedures as miscarriages.

Table 2. Percentage distribution of characteristics of facilities providing abortions, and percentage using specific procedures and offering specific contraceptive methods, all by region

Characteristic, procedure and method	Total (N=225)	Southeast (N=40)	Southwest (N=121)	Northwest (N=34)	Northeast (N=30)
PERCENTAGE DISTRIBUTION					
Ownership*					
Private	87	92	89	91	73
State or federal government	13	8	12	9	27
Mission/local government	0	0	0	0	0
Type of practitioner					
General practitioner	73	91	62	85	74
Obstetrician/gynecologist	10	3	18	0	7
Other specialist physician	8	3	10	4	14
Other	8	4	10	11	5
Gestational age limit for abortions					
≤8 weeks	30	43	25	20	40
9–12 weeks	47	27	55	55	34
≥13 weeks	24	29	20	25	27
Anesthesia used					
Intravenous or general only	52	35	63	53	29
Local and intravenous or general	24	47	14	27	25
None	18	8	15	14	46
Local only	5	6	6	4	0
Other only	2	4	1	2	1
Cost at ≤8 weeks					
<\$6.25	23	22	22	22	32
\$6.25–12.50	39	53	30	52	34
>\$12.50	38	25	48	27	34
Cost at 13–16 weeks					
<\$6.25	6	0	14	0	0
\$6.25–24.99	34	44	27	48	25
\$25.00–62.50	53	48	59	37	61
>\$62.50	7	8	0	15	14
Contraceptive counseling provided					
Before procedure	19	15	26	9	4
After procedure	40	39	38	16	74
Before and after procedure	32	27	29	57	21
Not provided	10	19	7	19	2
Total	100	100	100	100	100
PERCENTAGE Procedure used					
Dilation and curettage	76	92	69	85	64
Manual vacuum aspiration	72	61	71	87	74
Dilation and evacuation	30	39	24	46	25
Electric vacuum aspiration	9	12	13	3	0
Saline instillation	5	7	5	6	0
Prostaglandin	3	2	2	0	12
Other	9	3	12	4	16
Contraceptive methods offered*					
Pill	88	84	81	99	94
Injectable	82	81	67	99	95
IUD	77	70	78	76	90
Condom	66	67	48	90	70
Rhythm	37	57	15	40	40
Female sterilization	30	23	40	14	39
Implant	4	8	0	4	7
Spermicide	6	3	0	1	29
Vasectomy	2	6	0	0	0
Other	2	0	0	0	13
None	5	6	8	0	5

*Information was not available for respondents in Lagos and Edo states. Note: N represents number of interviews conducted with abortion providers overall and in each region.

8.8% of women who had had an abortion performed by a doctor had experienced complications that were treated in a private or government clinic.⁹ We assumed that this proportion applied nationally, and subtracted 8.8% of the number of physician-performed abortions from the

number of abortion complications treated, leaving about 121,000 cases of complications from nonphysician abortions.

Third, we obtained from survey respondents who treat abortion complications estimates of the approximate proportion of women with complications who

actually obtain treatment from a hospital or clinic. On average, providers estimated that 66% of these women get treatment within the health care system; therefore 34% of women who have complications from nonphysician abortions do not receive treatment. This yields a total estimate of 183,000 women who have complications from nonphysician abortions.

Finally, we further adjusted the number of nonphysician abortions based on assumptions about the proportion of women having these abortions who would have experienced medical complications. If we assume that all women who have nonphysician abortions experience complications, then the annual number of nonphysician abortions in Nigeria would be equal to the estimated number of women who experience complications from these procedures (approximately 183,000).

This most likely represents an underestimate, however, since some nonphysician providers such as midwives, nurses and paramedics have obtained medical training and therefore should be able to perform abortions that do not result in medical complications. Additionally, some women who experienced complications from induced abortions may have received private treatment from nurses or other nonphysicians, and were therefore not included in our facility-based estimates.

A more realistic, yet still moderate, assumption, based on surveys in other developing countries where abortion is restricted,¹⁰ is that half of all women who have nonphysician abortions experience complications requiring treatment by a physician. Using this assumption, the estimated annual number of nonphysician abortions in Nigeria is 366,000.

Estimated Total, Rates and Ratios

Assuming that all women who have nonphysician abortions experience complications requiring treatment, a very conservative estimate of the total number of induced abortions performed annually in Nigeria by both physicians and nonphysicians is about 428,000 (the sum of 245,000 and 183,000). A more realistic, “best” estimate, assuming that half of all women who have nonphysician abortions experience complications requiring treatment, is that there are approximately 610,000 abortions nationwide (Table 1). Nonetheless, given the incompleteness of the sampling frame and the likelihood that some respondents did not report all abortions performed at their facilities, even this best estimate could be too low.

Using both the minimum and best estimates of the total annual count of abortions in Nigeria, we find that the annual abortion rate is no less than 18 abortions per 1,000 women aged 15–44, and more realistically is 25 per 1,000. This rate is higher than most Western European countries and is close to the 1995 U.S. rate of 23 abortions per 1,000 women of childbearing age.¹¹

Similarly, the number of abortions per 100 pregnancies (equivalent to the percentage of pregnancies that end in abortion) is at least nine abortions per 100 pregnancies, and is probably closer to 12 per 100.* The minimum and best estimates for the number of abortions per 100 live births are 10 per 100 and 14 per 100, respectively.

Regional differences in the level of abortion are considerable. Based on our best estimates, the abortion rate is highest in the Southwest (46 abortions per 1,000 women), somewhat lower in the Southeast (32 abortions per 1,000) and much lower in the two northern regions (10–13 per 1,000). In the Southwest, the ratio of treatment for complications from abortions to that for miscarriages is higher than in any other region—about 65,000 complications compared with nearly 46,000 miscarriages; in the Northwest, some 12,000 cases of abortion complications are treated annually, compared with about 28,000 miscarriages (not shown). Finally, the proportion of abortions performed by nonphysicians is highest in the Northeast (72% of procedures, compared with a national average of 60%).

Characteristics of Providers

Clinics and Hospitals

Twenty-seven percent of private clinics and hospitals (excluding the large known providers) perform abortions at least occasionally. About 15% of public facilities and none of the mission hospitals interviewed provide abortion services (not shown). As presented in Table 2, 87% of clinics and hospitals that provide abortions are privately run. Small and large facilities (those with fewer than and more than 10 beds, respectively) are equally likely to perform abortions (not shown).

In approximately three-quarters of clinics and hospitals that provide abortions, the physicians who perform the procedures are nonspecialist general practitioners. Obstetrician-gynecologists provide abortions in 10% of such facilities, and other medical specialists do so in an additional 8% of facilities. The proportion of facilities that perform abortions does not differ depending on whether the facility is operated by an obstetrician-gynecologist or by a general practitioner (not

shown). The proportion of providers who are specialist physicians is higher in the Southwest (28%) than in the other regions.

Nearly one-third of facilities that provide abortion do so only if the pregnancy is eight or fewer weeks from the last menstrual period, and some 76% of providers do not perform abortions beyond 12 weeks of gestation. Facilities where relatively large numbers of abortions are performed and those with 50 or more beds are more likely to offer services beyond 12 weeks than are small practices and those with few beds (not shown).

Dilation and curettage and manual vacuum aspiration are the abortion methods most commonly used by medical providers (76% and 72%, respectively). In the Southeast, dilation and curettage is used by more facilities than is manual vacuum aspiration, while in the Northeast, manual vacuum aspiration is more common than dilation and curettage. In the Southwest and Northwest regions, both methods are used in an equal proportion of facilities. None of the public facilities surveyed provide abortion using manual vacuum aspiration; among private facilities, those with a large numbers of beds are more likely than smaller facilities to use this method. Overall, electric vacuum aspiration, saline instillation, prostaglandin and other abortion methods are each used by fewer than 10% of facilities.

More than 75% of all facilities that provide abortion offer general anesthesia or intravenous sedation to control pain during the procedure, with nearly one-third of these facilities offering local anesthesia as well. About 5% of facilities use only local anesthesia. Nationally, almost one in five facilities—and nearly half of those in the Northeast—offer no anesthesia. Facilities that use no anesthesia are as likely to use dilation and curettage as they are to offer manual vacuum aspiration, even though manual vacuum aspiration generally is considered less painful if anesthesia is unavailable. Small hospitals are more likely than large hospitals to use no anesthesia (not shown).

As expected, the charge for an abortion is greater for procedures occurring later in pregnancy. For abortions performed within eight weeks of the last menstrual period, the usual charge is about \$6–13 (500 to 999 naira, the Nigerian unit of currency[†]). Early second-trimester abortions (13–16 weeks) cost the patient \$25–63 (2,000 to 4,999 naira) at about half of the health facilities offering abortions and \$6–25 at one-third of the sites. Fees are lower in public than in private facilities; 66% of public establishments charge less

than \$6.25 for abortions before eight weeks of gestation; some of these charge nothing at all (not shown). Compared with facilities that provide fewer abortions, those reporting 500 or more abortions a year charge lower fees for abortions before eight weeks and higher fees on average for abortions at 13–16 weeks (not shown).

Some 95% of providers offer contraceptive services or supplies to women seeking abortions, most commonly the pill, injectable hormonal contraceptives, the IUD and condoms. Hospitals with more than 50 beds are more likely than smaller facilities to offer all methods except injectables, oral contraceptives and vasectomy (not shown). Larger facilities are especially likely to provide female sterilization and the hormonal implant and to recommend periodic abstinence.

Treatment of Abortion Complications

Table 3 (page 162) shows characteristics of treatment for complications from abortions and miscarriages and sources of those complications. More than half of the abortion complication cases are treated on an inpatient basis. In all regions, inpatient treatment is more common for women with complications from abortions than it is for women who have experienced miscarriages; this finding offers support for reports that complications of induced abortion are on average more serious and require longer hospitalization than those of miscarriages.¹² The proportion of patients treated as inpatients is higher in facilities with 50 or more beds than it is in those with fewer beds, and is also higher in public than in private locations (not shown). It is likely that patients with the most serious complications are referred to larger public hospitals.

Among facilities where complications are treated, five out of six report using dilation and curettage in at least some of the cases in which uterine evacuation is needed, while more than half report using manual vacuum aspiration, and only a few of the facilities use electric vacuum aspiration. Manual vacuum aspiration is used by a higher proportion of facilities in the Southwest and Northwest than in the other regions.

Respondents considered pharmacists or chemists as one of the two most com-

*For these estimates, pregnancies included only births and abortions; miscarriages were excluded.

†Prices were translated into U.S. currency at the rate of 80 naira per dollar; the average per capita monthly gross national product in Nigeria is approximately U.S. \$23. (Source: The World Bank, *Social Indicators of Development*, 1996, Baltimore, MD, USA: The Johns Hopkins University Press, 1996.)

Table 3. Characteristics of the treatment of complications from abortions and miscarriages, and characteristics of the source of complications, by region

Characteristic	Total (N=404)	Southeast (N=147)	Southwest (N=100)	Northwest (N=84)	Northeast (N=73)
% of women with complications receiving treatment on inpatient basis					
From abortions	56	49	66	45	49
From miscarriages	38	35	62	26	42
% of facilities using method to treat complications					
Dilation and curettage	83	89	79	80	77
Manual vacuum aspiration	51	41	58	65	54
Electric vacuum aspiration	6	5	6	8	3
% of respondents indicating provider as a common source of complications*					
Pharmacist/chemist	50	72	19	47	46
Paramedic	40	38	42	41	43
Nurse/midwife	35	17	52	39	48
Doctor	22	23	18	19	30
Traditional birth attendant	14	19	8	6	17
Woman herself	11	11	14	5	12
Quack	7	2	23	1	3
Other	5	6	4	4	6
% of respondents indicating abortion method is commonly used by nonphysicians†					
Dilation and curettage	44	33	56	57	42
Commercial drugs	32	43	13	40	46
Injections	26	35	14	33	8
Solid/sharp objects	21	28	22	12	12
Traditional herbs (oral)	17	22	12	8	18
Quinine/chloroquine	12	18	0	6	17
Traditional herbs (vaginal)	8	12	4	9	9
Vacuum aspiration	5	3	4	10	9
Other	48	65	21	58	67
% of respondents indicating abortion method is commonly used by woman herself‡					
Commercial drugs	39	37	30	52	57
Traditional herbs (oral)	30	35	27	25	23
Alcohol	29	43	21	13	18
Quinine/chloroquine	16	25	3	11	15
Traditional herbs (vaginal)	10	12	6	18	6
Injections	9	14	2	7	8
Solid/sharp objects	1	2	0	1	0
Other	61	62	47	77	79

*Based on respondent's estimate of the two most common sources of complications. †Based on respondent's estimate of the most common methods. ‡Note: Data on facilities in Edo and Lagos were not available. Ns represent the number or sites surveyed where complications from induced abortion or miscarriage are treated.

mon providers of abortions resulting in complications (mentioned by 50% of respondents), followed by paramedics (40%), nurses or midwives (35%) and other doctors (22%). Respondents differed sharply according to region in their opinions as to the sources of abortion complications. In the Southeast, for example, 72% of respondents identified pharmacists as one of the most common sources of complications, 38% identified paramedics and 17% identified nurses and midwives. In the Southwest, nurses and midwives were mentioned by 52% of respondents, while only 19% named pharmacists as one of the most likely sources of complications. "Quacks"—individuals with no formal training who nonetheless provide medical treatment—were mentioned by 23% of respondents in this region.

Respondents also were asked which abortion methods they believed were

commonly used by nonphysician providers and by women to induce an abortion themselves. Nearly half of providers identified dilation and curettage as one of the abortion methods most commonly used by nonphysician providers, with commercial drugs and injections mentioned by about one-third of respondents. Insertion of solid or sharp objects, a particularly dangerous method, was named by one out of five respondents. Misoprostol, a prostaglandin that is commonly used in Brazil, the Philippines and elsewhere to terminate pregnancy, is not generally available in Nigeria and was rarely mentioned.

The complications caused by women themselves were thought to result most often from the use of commercial drugs (mentioned by about four in 10 respondents), alcoholic drinks and traditional herbs (about three in 10 respondents for

each) and quinine or chloroquine (mentioned by about one in six respondents).

Discussion

Unintended pregnancy is a problem in all parts of the world, and Nigeria is no exception. About 12% of pregnancies in Nigeria end in abortion (excluding miscarriages), and 9% result in unplanned births.¹³ For every 1,000 women of reproductive age, we estimate that 25 induced abortions are performed each year.

Our best estimate of the Nigerian abortion rate is moderate in comparison with countries in many other parts of the world, and close to the estimated rate for less-developed countries as a group. The abortion rate is substantially higher in Eastern Europe, where it is estimated to be 83 abortions per 1,000 women, and rates are believed to be somewhat higher in South America and the Caribbean (roughly 38–47 abortions per 1,000 women). In Eastern and Southern Africa, Asia and Central America, rates are in the range of 22–36 per 1,000, similar to our estimate for Nigeria. Abortion rates are considerably lower in Northern and Middle Africa and in Western Europe (11–15 per 1,000).¹⁴

To our knowledge, this is the first time a national survey of physician abortion providers has been conducted in a developing country where abortion is largely illegal. The difficulties of conducting research in these circumstances may have caused us to underestimate the number of abortions for several reasons. First, the sampling frame was incomplete. Half of the large recognized abortion providers identified by the interviewers did not appear on the lists from which our main sample was drawn, and many of those in the supplementary list were not on the FOS list. This indicates that our survey missed a significant but unknown percentage of the facilities where physicians might perform abortions and treat complications.

In addition, it was the impression of our interviewers, most of whom were familiar with the facilities they were surveying, that some physicians in the survey underreported the number of abortions they perform. Moreover, our assumption that 50% of women undergoing nonphysician abortions experience complications requiring treatment by a physician may be too high; if so, this would mean that our "best" estimate is biased downward. Also, we were unable to estimate the number of women treated for abortion complications in health centers and other locations by nurses, midwives and paramedics. Finally, error also might have been introduced if abortions are

more common at some times of the year than at others. However, we believe any such seasonal effect would be minor.

Abortion rates are higher in the southern regions of Nigeria than in the north. This difference is to be expected in view of the higher levels of urbanization, education and economic development in the south. These factors generally lead to a desire for smaller families, to delays in the age at marriage and to higher levels of premarital sexual activity, all resulting in unintended pregnancies. As urbanization and modernization continue, it is likely that the level of unplanned pregnancy and abortion will increase, although over the long run they should decrease with better contraceptive availability and use.

Many abortions—40%, according to our best estimate—are performed by physicians and are probably relatively safe. This proportion is similar to an estimate of 32% based on an opinion survey of health professionals.¹⁵ However, both of these are much lower than the estimate of 80% found in a community survey of women in Jos and Ile-Ife.¹⁶ It is probable, though, that among women who have had abortions, those who have had an abortion performed by a physician are more likely to report the procedure when questioned directly in a survey interview. It is also possible that women who have a nonphysician abortion will report it as a physician abortion if the complications are treated by a physician.

Some 1,300 facilities in all parts of the country are responding to women's need to terminate unwanted pregnancies. As in other countries with restrictive abortion laws, it is not uncommon for abortion services to be widely available from physicians. In the Netherlands, for example, before restrictions were lifted in 1984, an organized network of clinics openly served women from all parts of the country and from other countries as well.¹⁷ Belgium, Greece and Taiwan all have had similar experiences.¹⁸

Manual vacuum aspiration is used by 51% of physicians treating incomplete abortions and miscarriages; 72% of the medical facilities that provide abortions use it at least some of the time. Manual vacuum aspiration is a safe, low-cost method of terminating pregnancies up to about 10 weeks of gestation. Compared with dilation and curettage, the other surgical method commonly used, manual vacuum aspiration has fewer complications and involves less pain for the patient.¹⁹ The widespread use of manual vacuum aspiration in Nigeria may be attributed to the efforts of national and in-

ternational nongovernmental organizations to train doctors in its use.

Although abortion services are available in many health facilities and from many trained physicians, our best estimate suggests that a majority of abortions are performed by nonphysicians, mainly pharmacists, paramedics, nurses and midwives. These procedures result in an enormous number of complications requiring treatment by physicians and hospitals, as well as many that do not receive needed treatment. A large proportion of these complications are presumably caused by nonphysicians' use of dilation and curettage, a method likely to cause injury and infection if not performed properly or under sanitary conditions. Manual vacuum aspiration is presumably a safer alternative for nonphysician providers to use.

Clearly, unsafe abortion remains common in Nigeria. Not only do large numbers of women require medical care as a result of unsafe abortion, but some of these women are likely to suffer long-term health consequences, while others will die as a result. The World Health Organization estimates that each year, 12,000 deaths in West Africa result from unsafe abortion.²⁰

We can only speculate as to why so many unsafe abortions take place in Nigeria despite the existence of more than 1,300 hospitals, clinics and individual practices nationwide that provide abortions. Many factors may contribute to women's continuing to resort to unsafe abortions—lack of knowledge that a local facility or physician will provide the service; difficulty in paying the charges; distance from a physician provider; delay in seeking care until after the point in gestation when the local clinic or private physician is able to perform an abortion safely; the reluctance of women to be seen obtaining services from a facility known to provide abortions; and their reluctance to seek an illegal procedure from a physician they may not know.

In Nigeria, most women and couples want a large family, but women also wish to control their family size and the spacing of their births. Still, contraceptive use as a means of doing so remains very low—6% among married women.²¹ Improving access and availability of contraceptive services and supplies and improving the quality of care are both important avenues for increasing women's ability to use contraceptives correctly and continuously and for reducing reliance on abortion.

It is promising that the vast majority of surveyed health facilities providing abortion or treating abortion patients report that they offer contraceptive counseling

and supplies, an indication that providers recognize the importance of such services and are willing to offer them. However, whether women are actually receiving these services and accepting a method is unclear. Additionally, family planning services for unmarried women and for adolescents are acknowledged to be nonexistent or seriously inadequate, even though sexual activity among the unmarried may be increasing.²² Some 9% of unmarried, sexually active young women use a modern method,²³ a level of use that clearly indicates the need for increased efforts to improve family planning services and to reduce barriers to use of these services.

Several steps could be taken to reduce the number of women who suffer medical complications from abortion. Women should be made aware of the health consequences of delaying their decision to seek an abortion and of the importance of seeking an abortion early in their pregnancy. Barriers to obtaining a safe abortion by a trained provider could be reduced by publicizing the availability of such services and by making abortion available at low cost in more facilities, including public hospitals and clinics. More training in the safest abortion methods could be provided to physicians and others who perform abortions, and more physicians could be encouraged to offer the service.

Reform of the abortion laws was proposed by the Federal Minister of Health in 1991 but was never enacted. Reform has also been endorsed by the Nigerian Medical Association.²⁴ The information provided here offers new evidence of the magnitude of the problem and the need for change.

References

1. Ladipo OA, Illegal abortion and effect on medical practice and public health—Nigeria, in Landy U and Ratnam SS, eds., *Prevention and Treatment of Contraceptive Failure*, New York: Plenum, 1986, pp. 53–60; and Renne E, Changing patterns of child-spacing and abortion in a northern Nigerian town, Working Paper Series, Princeton, NJ: Office of Population Research, No.97-1, 1997.
2. United Nations (UN), *Abortion Policies: A Global Review, Volume II*, New York: UN, 1993, p. 177; and Center for Reproductive Law and Policy (CRLP) and International Federation of Women Lawyers (Kenya Chapter), *Women of the World: Laws and Policies Affecting Their Reproductive Lives, Anglophone Africa*, New York: CRLP, 1997, pp. 81–82.
3. Okonofua FE et al., *Women's Experiences of Unwanted Pregnancy and Induced Abortion in Nigeria: Summary Report*, New York: Population Council, 1996.
4. Archibong EI, Illegal induced abortion—a continuing problem in Nigeria, *International Journal of Gynecology and Obstetrics*, 1991, 34(3):261–265; Kinoti SN et al., *Monograph of Complications of Unsafe Abortion in Africa*, Baltimore, MD, USA: Johns Hopkins Program for International Education in Reproductive Health, 1995; Ladipo OA, 1986, op. cit. (see reference 1); Megafu U and Ozumba BC, Mor-

bidity and mortality from induced illegal abortion at the University of Nigeria Teaching Hospital, Enugu: a five-year review, *International Journal of Gynecology and Obstetrics*, 1991, 34(2):163–167; and Unuigbo JA, Orhue AA and Oronsaye AU, Maternal mortality at the University of Benin Teaching Hospital, Benin City, Nigeria, *Tropical Journal of Obstetrics and Gynecology*, 1988, 1(1):1–8.

5. UN Development Programme (UNDP), *Human Development Report, 1996*, New York: Oxford University Press, 1996, pp. 154–155; and World Health Organization (WHO), *Unsafe Abortion: Global and Regional Estimates of Incidence of and Mortality Due to Unsafe Abortion with a Listing of Available Country Data, 3rd Edition*, Geneva: WHO, 1998, Table 2, p. 8.

6. Federal Republic of Nigeria 1991 population census (provisional results), *Federal Republic of Nigeria Official Gazette*, Nov. 30, 1992, Vol. 79, No. 56.

7. UN, *The Challenge of Urbanization: The World's Largest Cities*, New York: UN, 1995, p. 132.

8. Okonofua FE, College of Medical Sciences, Obafemi Awolowo University, Ile-Ife, Nigeria, personal communication, Feb. 17, 1995.

9. Unpublished data from the Nigerian Campaign Against Unwanted Pregnancy.

10. Singh S et al., Estimating the level of abortion in the Philippines and Bangladesh, *International Family Planning Perspectives*, 1997, 23(3):100–107; Liskin LS, Complications of abortion in developing countries, *Population Reports*, Series F, No. 7, 1980; and S and Wulf D, Estimated levels of induced abortion in six Latin American countries, *International Family Planning Perspectives*, 1994, 20(1):4–13.

11. Henshaw SK, Abortion services in the United States, 1995–1996, *Family Planning Perspectives*, 1998 (forthcoming).

12. Kinoti SN et al., 1995, op. cit. (see reference 4); 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; Liskin LS, 1980, op. cit. (see reference 10); and Singh S and Wulf D, The likelihood of induced abortion among women hospitalized for abortion complications in four Latin American countries, *International Family Planning Perspectives*, 1993, 19(4):134–141, Table 3.

13. Nigeria, Federal Office of Statistics and Institute for Resource Development (IRD)/Macro International, *Nigeria: Demographic and Health Survey, 1990*, Columbia, MD, USA: IRD 1992, Table 6.7, p.75; and UN, *World Population Prospects: The 1996 Revision, Annex II and III*, New York: UN, 1996, p. 318.

14. Singh S and Henshaw SK, The incidence of abortion: a worldwide overview, paper presented at the International Union for the Scientific Study of Population Seminar on Socio-cultural and Political Aspects of Abortion from an Anthropological Perspective, Trivandrum, India, Mar. 25–28, 1996, Table 1.

15. Makinwa-Adebusoye P, Singh S and Audam S, Nigerian health professionals' perceptions about abortion practice, *International Family Planning Perspectives*, 1997, 23(4):155–161.

16. Okonofua FE et al., 1996, op. cit. (see reference 3).

17. Ketting E and Schnabel P, Induced abortion in the Netherlands: a decade of experience, 1970–1980, *Studies in Family Planning*, 1980, 11(12):385–394.

18. Humblet PC, Vekemans M and Buekens P, Developments in abortion policy in a context of illegality, *European Journal of Public Health*, 1996, 6(4):288–293; Conninos AC, Greece, in Sachdev P, ed., *International Handbook on Abortion*, New York: Greenwood Press, 1988, pp. 207–217; and Tietze C and Henshaw SK, *Induced Abor-*

tion, A World Review, 1986, New York: The Alan Guttmacher Institute (AGI), 1986.

19. Greenslade FC et al., *Manual Vacuum Aspiration: A Summary of Clinical & Programmatic Experience Worldwide*, Carrboro, NC: IPAS, 1993.

20. WHO, 1998, op. cit. (see reference 5).

21. AGI, *Into a New World: Young Women's Sexual and Reproductive Lives*, New York: AGI, 1998, Appendix Table 5, Columns 10–12.

22. Backer GK and Rich S, Influences on adolescent sexuality in Nigeria and Kenya: findings from recent focus group discussions, *Studies in Family Planning*, 1992, 23(3):199–210; Adetoro OO, Babarinsa AB and Sotiloye OS, Socio-cultural factors in adolescent septic illicit abortions in Ilorin, Nigeria, *African Journal of Medicine and Medical Sciences*, 1991, 20(2):149–153; and Feyisetan B and Pebley A, Premarital sexuality in urban Nigeria, *Studies in Family Planning*, 1989, 20(6):343–354.

23. Ibid.

24. Nigerian Medical Association (NMA), Decision of the NMA delegates meeting on Friday, 8 December, 1995, at the Old Board Room, Lagos University Teaching Hospital, Lagos, Nigeria, on: Reformation of the "abortion law" in Nigeria, *Nigerian Medical Journal*, 1996, 30(1):47–48.

Resumen

Contexto: Si bien el aborto es ilegal en Nigeria, salvo que se trate de salvar la vida de la mujer, anualmente miles de mujeres recurren a este procedimiento. Es necesario disponer de información sobre la incidencia del aborto y sobre las consecuencias de realizarlo fuera del sistema de salud, con el fin de formular políticas y programas para abordar este problema.

Métodos: Experimentados médicos trabajaron con una muestra representativa a nivel nacional y condujeron entrevistas en 672 clínicas de Nigeria, las cuales fueron consideradas como centros que tenían el potencial de realizar abortos o atender casos de complicaciones de abortos. Los datos recopilados fueron utilizados para calcular el número de abortos realizados anualmente y para describir los servicios relacionados con este procedimiento.

Resultados: Anualmente, se realizan aproximadamente 610.000 abortos en Nigeria, una tasa de 25 abortos por cada 1.000 mujeres de 15–44 años. La tasa es mucho más baja en las zonas rurales pobres del norte de Nigeria que en la región más desarrollada del sur del país. Se calcula que el 40% de los abortos son realizados por médicos, en instalaciones de salud, en tanto que el resto lo realizan individuos que no son médicos. De los abortos realizados por los médicos, el 87% se realiza en clínicas privadas y el 73% lo realiza médicos no especializados. Las tres cuartas partes de los médicos realizan los abortos mediante el método de aspiración manual y el 51% de los que tratan las complicaciones de abortos también utilizan este método. Los médicos entrevistados indicaron que los principales métodos utilizados por el personal no médico para in-

ducir los abortos son la dilatación y el raspado, las hormonas o las drogas sintéticas, y la inserción de objetos sólidos o filosos.

Conclusiones: Si bien el aborto está muy restringido en Nigeria, se realiza un elevado número de procedimientos, en forma segura y también en condiciones precarias. Las políticas para mejorar el acceso a los servicios de anticonceptivos reducirían el número de embarazos no planeados y los abortos, y esto junto con un mayor acceso a servicios seguros del aborto ayudarían a preservar la salud y vida de la mujer de Nigeria.

Résumé

Contexte: Bien que l'avortement soit illégal, sauf pour sauver la vie de la mère, des milliers de femmes y recourent chaque année au Nigeria. Des informations documentant l'incidence de l'avortement et les conséquences de sa pratique en dehors du système de prestations médicales sont nécessaires à l'élaboration de politiques et de programmes aptes à faire face au problème.

Méthodes: Des médecins expérimentés ont mené des interviews dans 672 centres de soins nigériens susceptibles de pratiquer l'avortement ou d'en traiter les complications. Les données obtenues ont servi à estimer le nombre annuel d'avortements provoqués et à décrire les prestations afférentes.

Résultats: Chaque année, environ 610.000 avortements sont provoqués au Nigeria, soit un taux de 25 avortements par millier de femmes âgées de 15 à 44 ans. Le taux est beaucoup moins élevé dans les régions rurales pauvres du nord du pays que dans celles à l'économie plus développée du sud. Environ 40% des avortements sont pratiqués par des médecins, dans des centres de soins établis, et les 60% restants par d'autres prestataires. Des procédures pratiquées par les médecins, 87% le sont dans des centres privés, et 73% sont effectuées par des médecins généralistes. Soixante-douze pour cent des médecins prestataires procèdent par ventouse obstétricale, de même que 51% des prestataires traitant les complications de l'avortement. Les médecins interviewés estimaient que les méthodes principales utilisées par les non-médecins incluaient le curetage, les médicaments hormonaux et synthétiques et l'insertion d'objets solides ou pointus.

Conclusions: Bien que soumis à de sérieuses restrictions, l'avortement se pratique en grands nombres au Nigeria, tant dans des conditions saines que peu sanitaires. L'adoption de politiques d'accès amélioré à la contraception permettrait de réduire le nombre de grossesses non désirées et d'avortements; unie à des procédures d'avortement sans risque plus accessibles, l'approche protégerait également la santé et la vie des Nigériennes.