common 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 Southwest, 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. 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. 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).

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 underestimated the number of abortions they perform. Moreover, our assumption that 50% of women undergoing nonphysician abortion experiences 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 might have been introduced if abortions are