

3 Knowledge of Contraception

3.1 INTRODUCTION

The spread of contraceptive use within a society can be viewed as a diffusion process (Tsui, 1985). The first stage is to become aware of and informed about contraceptive methods. In populations with family planning policies designed to increase contraceptive use, measuring the level of awareness of contraception also provides a useful measure of the success of information, education, and communication activities and may help to identify program areas that need to be strengthened.

3.2 SPONTANEOUS KNOWLEDGE

As expected, given existing knowledge of regional patterns of contraceptive use, the percentage of currently married women who spontaneously reported at least one method of contraception shows marked regional variation among DHS-II surveys (Table 3.1). In Latin America and the Caribbean, at least 80 percent of currently married women spontaneously reported knowing of at least one method of contraception in all surveys. Knowledge was similarly high in the Asia/Near East/North Africa region, with the notable exceptions of Pakistan and Yemen, where less than half of currently married women spontaneously reported knowing a contraceptive method. The level of spontaneous knowledge of at least one method is generally much lower in sub-Saharan Africa, but that region also presents marked variation among the countries. Fewer than 30 percent of currently married women in Burkina Faso and Nigeria were able to spontaneously name a method, but more than 75 percent in Malawi and Zambia and 89 percent in Rwanda could do so.

Among currently married women surveyed in Latin America and the Caribbean, a much greater percentage spontaneously mentioned a modern method than a traditional one. Only in Peru did spontaneous reporting of at least one traditional method exceed 50 percent, while spontaneous reporting of at least one modern method reached at least 75 percent in all five surveys. The pattern is similar in the Asia/Near East/North Africa region. In that region, the exception is Jordan, where currently married women were more likely to spontaneously report a traditional method than a modern one, primarily because of the emphasis placed on prolonged breastfeeding in the Jordan family planning program.

The pattern in sub-Saharan Africa differs from that in the other two regions and is again more variable within the region. Five of the 11 countries (Burkina Faso, Namibia, Nigeria, Rwanda, and Tanzania) conform to the general pattern of the other two regions, that is, women were far more likely to spontaneously mention a modern method than a traditional one. In another 5 of the 11 countries (Cameroon, Madagascar, Malawi, Niger, and Zambia), the percentage of women who spontaneously mentioned at least one traditional method was only slightly smaller than the percentage who spontaneously mentioned a modern one, and in Senegal, women were more likely to spontaneously mention a traditional method than a modern one. In all sub-Saharan African countries surveyed except Cameroon, Madagascar, and Rwanda, the traditional method most likely to be mentioned spontaneously fell in the "other traditional method" category. This probably reflects spontaneous reporting of prolonged abstinence as a contraceptive method and suggests that many women do perceive this behavior as having a contraceptive purpose.

The method named spontaneously by the largest percentage of women was the pill in all countries except Rwanda, Senegal, and Jordan. In those three surveys, the pill was the second most frequently mentioned method. Male sterilization was named spontaneously by the smallest percentage of women in all countries except Namibia, Rwanda, Indonesia, Pakistan, Yemen, and Colombia. This is consistent with the pattern observed in DHS-I surveys (Rutenberg et al., 1991).

3.3 PROBES KNOWLEDGE

Virtually all currently married women in Latin America and the Caribbean know at least one method of contraception when spontaneous and probed knowledge are considered together (Table 3.1). The same is true in the Asia/Near East/North Africa region, except in Pakistan and Yemen, where only 78 and 58 percent, respectively, of currently married women recognized at least one method of contraception. In sub-Saharan Africa, the pattern is similar to that for spontaneous knowledge: total knowledge is generally lower and more variable among surveys in this region than in the other two. More than 90 percent of currently married women recognized at least one method of contraception in Malawi, Namibia, Rwanda, and Zambia, but less than half

Table 3.1 Spontaneous knowledge and total knowledge of contraceptive methods

Percentage of currently married women 15-49 who have spontaneous (S) knowledge of specific contraceptive methods and the total (T) percentage who know specific methods, Demographic and Health Surveys, 1990-1993

| Country | Any method | | Any modern method | | Pill | | IUD | | Injection | | Vaginal methods | | Condom | | Female sterilization | | Male sterilization | | Norplant | | Any traditional method | | Periodic abstinence | | Withdrawal | | Other traditional methods | |
|-------------------------------------|------------|------|-------------------|------|------|------|------|------|-----------|------|-----------------|------|--------|------|----------------------|------|--------------------|------|----------|------|------------------------|------|---------------------|------|------------|------|---------------------------|------|
| | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T | S | T |
| Sub-Saharan Africa | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Burkina Faso | 27.2 | 68.7 | 22.7 | 63.3 | 21.0 | 50.3 | 9.0 | 34.4 | 6.0 | 41.2 | 3.5 | 17.3 | 8.6 | 48.9 | 0.7 | 33.9 | 0.3 | 12.9 | 1.8 | 1.8 | 8.1 | 45.1 | 2.6 | 31.1 | 0.5 | 14.9 | 5.9 | 26.1 |
| Cameroon | 35.5 | 65.3 | 26.6 | 62.9 | 20.7 | 45.5 | 8.2 | 29.9 | 7.3 | 40.1 | 2.8 | 15.3 | 10.0 | 39.7 | 3.8 | 50.9 | 0.0 | 7.3 | U | U | 22.4 | 48.3 | 13.6 | 39.4 | 1.8 | 35.7 | 11.4 | 11.4 |
| Madagascar | 36.7 | 66.6 | 28.6 | 61.8 | 20.5 | 41.0 | 6.3 | 17.3 | 19.1 | 48.3 | 2.3 | 8.1 | 10.5 | 29.1 | 3.6 | 41.1 | 0.3 | 6.8 | 1.6 | 1.6 | 22.2 | 48.5 | 16.0 | 44.5 | 1.2 | 25.3 | 9.3 | 9.3 |
| Malawi | 76.2 | 94.6 | 60.7 | 91.8 | 52.5 | 82.9 | 15.0 | 46.3 | 27.4 | 68.3 | 9.9 | 47.8 | 31.6 | 73.2 | 4.8 | 63.1 | 1.0 | 18.8 | U | U | 56.3 | 76.5 | 8.4 | 49.1 | 3.5 | 46.4 | 52.0 | 52.0 |
| Namibia | 71.8 | 90.4 | 68.3 | 90.3 | 59.1 | 82.4 | 19.4 | 40.5 | 57.0 | 84.8 | 4.7 | 15.3 | 20.7 | 70.6 | 11.9 | 60.1 | 5.2 | 27.3 | U | U | 13.7 | 42.4 | 4.7 | 32.3 | 2.9 | 29.5 | 8.3 | 8.3 |
| Niger | 38.4 | 77.3 | 26.1 | 58.0 | 24.6 | 44.9 | 7.7 | 24.9 | 14.8 | 39.3 | 2.0 | 11.0 | 4.1 | 22.7 | 1.1 | 39.9 | 0.2 | 10.8 | U | U | 19.5 | 67.4 | 0.4 | 9.7 | 0.3 | 9.6 | 19.2 | 66.3 |
| Nigeria | 28.2 | 43.6 | 23.4 | 41.2 | 18.0 | 33.8 | 9.1 | 19.8 | 14.9 | 33.6 | 3.5 | 12.3 | 6.5 | 21.6 | 4.2 | 19.4 | 1.2 | 6.7 | U | U | 12.9 | 23.6 | 3.1 | 14.7 | 1.8 | 12.4 | 10.3 | 10.3 |
| Rwanda | 88.8 | 99.0 | 85.5 | 98.8 | 73.2 | 96.7 | 14.3 | 69.7 | 78.4 | 97.3 | 3.3 | 27.0 | 37.1 | 89.7 | 6.4 | 75.2 | 2.7 | 37.6 | 8.6 | 36.2 | 35.4 | 84.4 | 29.9 | 77.2 | 9.3 | 62.1 | 0.5 | 0.5 |
| Senegal | 54.3 | 75.0 | 34.5 | 70.3 | 32.1 | 63.2 | 17.6 | 43.0 | 8.1 | 33.5 | 2.8 | 12.1 | 5.4 | 36.9 | 2.1 | 48.7 | 0.2 | 4.9 | 1.8 | 7.7 | 41.7 | 49.6 | 3.8 | 20.9 | 0.7 | 15.4 | 40.4 | 40.4 |
| Tanzania | 59.4 | 80.2 | 51.9 | 77.6 | 49.8 | 74.6 | 16.2 | 35.0 | 18.0 | 44.0 | 6.7 | 22.2 | 20.0 | 55.0 | 9.9 | 54.6 | 1.8 | 11.3 | U | U | 30.2 | 48.9 | 5.7 | 26.8 | 4.0 | 27.1 | 24.6 | 24.6 |
| Zambia | 75.9 | 93.7 | 61.5 | 90.7 | 58.3 | 84.7 | 16.2 | 49.2 | 9.4 | 42.9 | 6.4 | 26.7 | 20.2 | 73.3 | 5.5 | 71.0 | 0.9 | 20.8 | U | U | 51.0 | 77.6 | 8.8 | 40.3 | 8.0 | 58.5 | 42.7 | 42.7 |
| Asia/Near East/ North Africa | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Egypt | 97.8 | 99.6 | 97.7 | 99.5 | 96.3 | 99.4 | 92.4 | 98.9 | 38.2 | 81.8 | 10.9 | 37.5 | 16.0 | 55.0 | 4.9 | 70.6 | 0.6 | 12.8 | 12.9 | 47.3 | 8.1 | 42.8 | 4.5 | 32.0 | 1.2 | 28.4 | 5.1 | 5.1 |
| Indonesia | 89.0 | 94.6 | 88.5 | 94.4 | 77.1 | 91.2 | 67.1 | 83.2 | 67.8 | 87.6 | 1.7 | 6.2 | 31.9 | 63.9 | 23.3 | 55.2 | 10.1 | 29.9 | 43.4 | 67.5 | 12.4 | 28.7 | 5.6 | 21.6 | 1.8 | 14.5 | 7.4 | 7.4 |
| Jordan | 98.4 | 99.2 | 92.9 | 99.0 | 89.6 | 98.3 | 85.3 | 97.9 | 14.5 | 50.7 | 25.8 | 58.1 | 19.4 | 55.2 | 31.3 | 94.5 | 3.9 | 26.3 | U | U | 94.5 | 96.3 | 35.0 | 78.0 | 26.9 | 70.2 | 92.7 | 92.7 |
| Morocco | 93.8 | 99.0 | 93.5 | 98.9 | 93.1 | 98.8 | 54.6 | 87.3 | 14.2 | 62.3 | 9.3 | 31.4 | 28.2 | 71.8 | 40.1 | 84.8 | 1.2 | 6.8 | U | U | 35.0 | 73.1 | 22.5 | 61.1 | 10.7 | 53.5 | 12.5 | 12.5 |
| Pakistan | 49.3 | 77.9 | 47.8 | 77.4 | 30.2 | 62.2 | 19.3 | 51.5 | 27.9 | 62.2 | 3.1 | 12.7 | 14.8 | 35.3 | 24.2 | 69.7 | 3.0 | 20.2 | 2.0 | 2.0 | 8.7 | 24.8 | 5.7 | 17.8 | 3.2 | 14.3 | 1.6 | 1.6 |
| Yemen | 38.9 | 57.7 | 33.4 | 53.2 | 31.2 | 51.3 | 16.3 | 33.5 | 13.8 | 31.9 | 2.4 | 7.0 | 3.6 | 10.3 | 6.2 | 24.0 | 3.0 | 13.4 | U | U | 17.1 | 23.9 | 5.3 | 13.1 | 2.5 | 8.5 | 13.9 | 13.9 |
| Latin America/ Caribbean | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brazil (NE) | 79.9 | 99.8 | 78.8 | 99.8 | 73.6 | 97.8 | 13.4 | 50.2 | 20.9 | 84.9 | 9.1 | 36.8 | 30.4 | 92.4 | 25.4 | 96.7 | 3.9 | 54.3 | U | U | 36.0 | 88.3 | 29.5 | 81.6 | 9.1 | 61.2 | 4.4 | 4.4 |
| Colombia | 96.0 | 99.7 | 95.3 | 99.7 | 88.5 | 98.6 | 63.5 | 94.1 | 39.9 | 92.3 | 36.0 | 84.4 | 36.6 | 88.1 | 30.4 | 95.2 | 6.8 | 65.1 | U | U | 32.7 | 80.2 | 23.9 | 70.7 | 6.6 | 59.9 | 9.3 | 9.3 |
| Dominican Republic | 93.7 | 99.8 | 93.2 | 99.8 | 89.6 | 99.0 | 55.6 | 93.7 | 20.4 | 80.6 | 28.4 | 67.1 | 48.2 | 97.0 | 19.8 | 99.4 | 2.6 | 58.3 | 18.8 | 62.7 | 32.4 | 84.5 | 16.4 | 67.3 | 2.7 | 74.6 | 19.6 | 19.6 |
| Paraguay | 81.0 | 97.7 | 75.0 | 96.3 | 67.2 | 93.6 | 30.5 | 84.5 | 40.9 | 88.5 | 9.6 | 45.7 | 16.0 | 66.7 | 8.6 | 70.3 | 0.8 | 16.4 | U | U | 41.4 | 91.3 | 19.1 | 61.2 | 3.2 | 53.3 | 25.5 | 86.0 |
| Peru | 86.5 | 96.9 | 79.6 | 94.5 | 66.6 | 89.4 | 55.4 | 86.6 | 36.1 | 82.2 | 25.9 | 65.3 | 32.8 | 77.7 | 13.8 | 82.6 | 4.2 | 51.4 | U | U | 54.0 | 90.0 | 40.0 | 86.1 | 7.4 | 57.5 | 21.5 | 21.5 |

U = Unknown (not available)

of currently married women recognized any method in Nigeria. Describing the methods to women increased reported knowledge in all surveys, especially in sub-Saharan Africa, where spontaneous knowledge was frequently low. For example, in Burkina Faso, only 27 percent of currently married women named a contraceptive method spontaneously, but 69 percent reported that they recognized at least one method after it was described to them. When spontaneous and probed knowledge are combined, knowledge of at least one modern method exceeds knowledge of at least one traditional method in all of the surveys except in Niger.

Overall, more than 80 percent of married women in the surveys in Latin America and the Caribbean know at least one traditional method of contraception. In the other two regions, the percentage of women who know at least one traditional method is more variable among countries, ranging from under 30 percent in Nigeria, Indonesia, Pakistan, and Yemen to over 80 percent in Rwanda and Jordan. Periodic abstinence is the most widely recognized traditional method in the majority of countries.

The pill is the most widely recognized modern method in 16 of the 22 surveys and is one of the three most widely recognized modern methods in all surveys. Knowledge of the pill ranges from 99 percent in Egypt and the Dominican Republic to only 34 percent in Nigeria. Knowledge of female sterilization is slightly higher than knowledge of the pill in Cameroon, Pakistan, and the Dominican Republic. In Namibia and Rwanda, injections are more widely known than the pill, and in Pakistan knowledge of the pill and injections is the same. In Madagascar, both injections and female sterilization are recognized by a larger percentage of women than the pill is.

Male sterilization is the least known modern method (excluding Norplant) in most surveys. Male sterilization is not widely known anywhere in sub-Saharan Africa nor in Asia/Near East/North Africa—in every survey in these two regions fewer than 40 percent of currently married women recognize the method even after probing. Knowledge of male sterilization exceeds 50 percent in the surveys in Latin America and the Caribbean, except in Paraguay, but exceeds 60 percent only in Colombia. The other methods that are generally not widely known are vaginal methods. In most surveys, fewer than half of currently married women recognized vaginal methods.

Data on knowledge of Norplant are available for selected surveys. Only spontaneous knowledge is recorded in

Burkina Faso, Madagascar, and Pakistan, and in all three surveys around 2 percent of married women mentioned Norplant when asked which methods of contraception they knew of. This level of spontaneous knowledge was higher than that found for male sterilization, female sterilization, and withdrawal in Burkina Faso, and for male sterilization and withdrawal in Madagascar. In the other countries with information on Norplant, probing increased the percentage of women who reported that they knew of the method. However, it remains one of the lesser known modern methods in those countries, except in Indonesia.

Probing was particularly effective in the case of female sterilization. The percentage of women who spontaneously reported female sterilization was under 40 percent in every survey except Morocco, and was under 30 percent in most surveys. However, after probing, the level of knowledge increased substantially. In the Dominican Republic, female sterilization was recognized by over 99 percent of married women after probing, making it the most widely known method. Yet, fewer than 20 percent had reported this method spontaneously, compared to nearly 90 percent who had reported the pill spontaneously. Furthermore, female sterilization is the most widely used method in the Dominican Republic, with 39 percent of currently married women reporting that they have been sterilized for contraceptive reasons (Table 6.1). This finding suggests that many sterilized women did not spontaneously report female sterilization as a contraceptive method. In Northeast Brazil also, only 25 percent of currently married women spontaneously mentioned female sterilization as a contraceptive method, but 38 percent reported that they had been sterilized.

3.4 KNOWLEDGE OF MORE THAN ONE METHOD

Knowledge of at least one method is an essential precondition for use of contraception, but knowledge of more than one method is required for a woman to make an informed choice. In addition, knowledge of more than one method demonstrates a greater depth of awareness of contraception and indicates the extent to which information on a range of contraceptive options has been disseminated in the population. Table 3.2 presents the percentage of currently married women who know one or more, two or more, and five or more methods of contraception.

In the surveys in Latin America and the Caribbean, the percentage of married women who know two or more methods of contraception is almost as high as the percentage who

Table 3.2 Knowledge of one or more, two or more, and five or more contraceptive methods

Percentage of currently married women 15-49 who know one or more, two or more, and five or more contraceptive methods, Demographic and Health Surveys, 1990-1993

| Country | Contraceptive methods known | | |
|---|-----------------------------|-------------|--------------|
| | One or more | Two or more | Five or more |
| Sub-Saharan Africa | | | |
| Burkina Faso | 68.7 | 57.0 | 33.1 |
| Cameroon | 65.3 | 55.2 | 35.9 |
| Madagascar | 66.6 | 54.3 | 26.7 |
| Malawi | 94.6 | 89.4 | 66.0 |
| Namibia | 90.4 | 85.2 | 48.5 |
| Niger | 77.3 | 55.9 | 25.5 |
| Nigeria | 43.6 | 36.5 | 18.5 |
| Rwanda | 99.0 | 98.3 | 84.5 |
| Senegal | 75.0 | 62.8 | 33.6 |
| Tanzania | 80.2 | 69.4 | 40.6 |
| Zambia | 93.7 | 88.0 | 60.3 |
| Asia/Near East/ North Africa | | | |
| Egypt | 99.6 | 98.9 | 67.0 |
| Indonesia | 94.6 | 90.1 | 64.7 |
| Jordan | 99.2 | 98.8 | 90.0 |
| Morocco | 99.0 | 94.2 | 72.3 |
| Pakistan | 77.9 | 70.8 | 36.2 |
| Yemen | 57.7 | 42.3 | 17.5 |
| Latin America/ Caribbean | | | |
| Brazil (NE) | 99.8 | 99.0 | 85.2 |
| Colombia | 99.7 | 99.2 | 92.4 |
| Dominican Republic | 99.8 | 99.6 | 95.3 |
| Paraguay | 97.7 | 95.0 | 80.1 |
| Peru | 96.9 | 93.9 | 82.9 |

know at least one method. In all five surveys, more than 90 percent of married women recognize at least two methods. The same is true in four of the six surveys in the Asia/Near East/North Africa region (Egypt, Indonesia, Jordan, and Morocco), where more than 90 percent of women know at least two methods. In Pakistan and Yemen, which have a much lower level of knowledge of any method, 71 and 42 percent, respectively, of married women know at least two methods.

The same pattern is repeated in sub-Saharan Africa. Countries with relatively high levels of knowledge of at least one method of contraception (Malawi, Namibia, Rwanda, Zambia) also have a relatively high level of knowledge of two or more methods. The difference between knowledge

of one method and knowledge of at least two methods is larger in the other surveys in sub-Saharan Africa, but more than 50 percent of married women know at least two methods of contraception in all countries in the region except Nigeria.

Knowledge of five or more methods indicates a high level of contraceptive awareness and a comprehensive knowledge of the options available. This level of awareness is high in Latin America and the Caribbean and in Jordan and Rwanda, where more than 80 percent of married women know five or more methods. In Egypt, Indonesia, and Morocco, and in Malawi and Zambia, between 60 and 75 percent of married women know at least five methods of contraception. In the other surveys in sub-Saharan Africa, and in Pakistan and Yemen, less than half of married women know five or more methods; and in Madagascar, Niger, Nigeria, and Yemen less than 30 percent have this level of contraceptive knowledge.

3.5 DEMOGRAPHIC AND SOCIOECONOMIC DIFFERENTIALS IN KNOWLEDGE

A number of factors lead one to expect demographic and socioeconomic differentials in women's knowledge of contraception. A woman's knowledge of contraceptive methods may depend on the stage of her reproductive career as indicated by her age and number of living children. Younger women just beginning their families may not be interested in delaying or preventing future births and hence may not seek out or recall information on methods of family planning. In populations where information on family planning is provided postpartum, women who have had no births at all have had less opportunity to receive information on contraceptive methods. In contrast, older women and those who already have large families may be motivated to find out about contraceptive methods and may better remember any information they receive.

The existence of socioeconomic differentials in knowledge of methods is consistent with the diffusion hypothesis for the spread of contraception (Tsui, 1985) mentioned earlier. Under this hypothesis, innovative groups in the population, such as younger, educated, urban women, are the first to become aware of, and to experiment with, contraception. Similar behavior begins to spread to other groups in the population until it reaches the more traditional groups, such as older, less educated, rural women. At the two extremes of the innovation process, socioeconomic differentials are ex-

pected to be very small: at one extreme, no one knows about contraception while, at the other extreme, everybody who needs to is using contraception. However, at all stages in between the extremes, the more elite groups would be expected to be at a later stage in the innovation process than the more traditional groups.

These two hypotheses suggest offsetting age effects. Younger women may be less motivated to find out about family planning and may have had less exposure to postpartum family planning advice, but they are also more likely to be aware of new ideas and to be educated. In contrast, older women may be motivated to find out about family planning but they may have more traditional lifestyles that inhibit the acquisition of such knowledge. Consequently, age differentials in knowledge of contraception are difficult to predict and are unlikely to be large.

Finally, women who have no knowledge of contraceptive methods are unable to use contraception, and hence, may be more likely to have a large number of living children. In addition, the number of living children a woman has is closely related to her age.

Current Age

Table 3.3 presents the percentage of currently married women who know at least one method of contraception by current age, number of living children, area of residence, and highest educational level attended. In the surveys in Latin America and the Caribbean where knowledge of at least one contraceptive method is near universal, age differentials in knowledge are negligible. Age differentials are weak also in the surveys in the Asia/Near East/North Africa region, including Pakistan and Yemen where overall knowledge is somewhat lower.

Table 3.3 Differentials in knowledge of any contraceptive method

Percentage of currently married women 15-49 who know any contraceptive method by age, number of living children, residence, and education, Demographic and Health Surveys, 1990-1993

| Country | Age group | | | Number of living children | | | | Residence | | Education | | | Total |
|---|-----------|-------|-------|---------------------------|------|------|-------|-----------|-------|-----------|---------|----------------------|-------|
| | 15-24 | 25-34 | 35-49 | 0 | 1-2 | 3-4 | 5+ | Urban | Rural | No educa- | Primary | Second-ary or higher | |
| | | | | | | | | | | tion | | | |
| Sub-Saharan Africa | | | | | | | | | | | | | |
| Burkina Faso | 68.7 | 72.4 | 63.9 | 68.9 | 67.7 | 69.1 | 69.2 | 93.9 | 63.4 | 65.2 | 87.7 | 98.6 | 68.7 |
| Cameroon | 66.0 | 68.1 | 61.2 | 66.3 | 63.4 | 65.8 | 66.3 | 77.4 | 57.7 | 38.5 | 84.2 | 100.0 | 65.3 |
| Madagascar | 61.0 | 71.5 | 65.5 | 63.1 | 67.2 | 67.9 | 66.3 | 91.9 | 61.4 | 41.6 | 64.6 | 94.6 | 66.6 |
| Malawi | 93.2 | 96.5 | 93.8 | 87.2 | 93.9 | 97.1 | 96.6 | 97.2 | 94.2 | 92.2 | 96.9 | 99.6 | 94.6 |
| Namibia | 91.9 | 93.2 | 87.4 | 91.7 | 92.2 | 93.4 | 85.5 | 95.5 | 87.2 | 79.0 | 90.5 | 98.3 | 90.4 |
| Niger | 72.1 | 80.9 | 78.6 | 63.2 | 76.8 | 80.5 | 82.9 | 93.1 | 74.7 | 76.5 | 84.9 | 96.7 | 77.3 |
| Nigeria | 41.0 | 46.5 | 42.0 | 32.1 | 41.4 | 42.7 | 52.5 | 70.4 | 36.3 | 29.1 | 65.4 | 87.9 | 43.6 |
| Rwanda | 98.5 | 99.5 | 98.7 | 97.7 | 99.0 | 99.5 | 99.0 | 99.8 | 99.0 | 98.3 | 99.6 | 100.0 | 99.0 |
| Senegal | 69.2 | 78.5 | 75.8 | 62.6 | 72.9 | 76.5 | 79.5 | 89.9 | 67.9 | 71.0 | 94.3 | 98.6 | 75.0 |
| Tanzania | 78.2 | 84.9 | 77.0 | 70.3 | 81.6 | 81.8 | 80.7 | 93.5 | 76.6 | 68.7 | 88.0 | 98.9 | 80.2 |
| Zambia | 91.8 | 96.1 | 92.7 | 83.5 | 94.9 | 94.9 | 94.9 | 97.2 | 90.6 | 84.5 | 95.0 | 98.7 | 93.7 |
| Asia/Near East/ North Africa | | | | | | | | | | | | | |
| Egypt | 99.2 | 99.8 | 99.5 | 98.5 | 99.7 | 99.8 | 99.4 | 99.8 | 99.4 | 99.2 | 99.8 | 100.0 | 99.6 |
| Indonesia | 95.2 | 96.3 | 92.5 | 88.8 | 95.6 | 95.7 | 93.5 | 97.9 | 93.3 | 84.6 | 95.9 | 99.6 | 94.6 |
| Jordan | 99.0 | 99.8 | 98.8 | 97.3 | 99.4 | 99.8 | 99.3 | 99.5 | 98.5 | 97.9 | 99.3 | 99.8 | 99.2 |
| Morocco | 98.9 | 99.1 | 98.9 | 99.2 | 99.3 | 98.7 | 98.8 | 99.8 | 98.3 | 98.7 | 100.0 | 100.0 | 99.0 |
| Pakistan | 72.5 | 79.3 | 79.6 | 64.2 | 77.5 | 79.8 | 81.7 | 91.3 | 72.0 | 73.8 | 91.7 | 94.9 | 77.9 |
| Yemen | 58.6 | 59.2 | 55.6 | 50.6 | 56.0 | 56.2 | 61.4 | 88.1 | 51.2 | 53.8 | 87.6 | 95.0 | 57.7 |
| Latin America/ Caribbean | | | | | | | | | | | | | |
| Brazil (NE) | 100.0 | 100.0 | 99.7 | 100.0 | 99.9 | 99.9 | 99.6 | 100.0 | 99.6 | 99.5 | 99.9 | 100.0 | 99.8 |
| Colombia | 99.6 | 100.0 | 99.5 | 99.7 | 99.5 | 99.9 | 100.0 | 99.6 | 100.0 | 99.2 | 99.8 | 99.7 | 99.7 |
| Dominican Republic | 99.8 | 99.8 | 100.0 | 100.0 | 99.8 | 99.7 | 100.0 | 100.0 | 99.6 | 99.6 | 99.8 | 100.0 | 99.8 |
| Paraguay | 97.6 | 98.4 | 97.2 | 94.7 | 98.3 | 98.6 | 96.9 | 98.6 | 96.8 | 91.6 | 97.3 | 99.4 | 97.7 |
| Peru | 95.6 | 97.9 | 96.5 | 95.8 | 98.0 | 97.6 | 94.3 | 99.2 | 91.1 | 84.1 | 95.8 | 99.8 | 96.9 |

Larger age differentials are seen in sub-Saharan Africa, but even in that region the differential in knowledge of at least one contraceptive method never exceeds 10 percentage points among the three age groups shown. However, in every survey in the region, knowledge is highest in the 25-34 age group. There is no consistency among countries as to greater or lesser knowledge between the 15-24 and the 35-49 age groups. These patterns are consistent with the offsetting influences on contraceptive knowledge in different age groups described above.

Knowledge of five or more contraceptive methods follows a clearer pattern (Table 3.4). In every survey except Pakistan and Yemen, the highest percentage of women who know five or more contraceptive methods is found in the 25-34 age group, and in all but four of these surveys (Burkina Faso, Cameroon, Namibia, and Indonesia) knowledge of five or more methods is more common among women age 35-49 than among women age 15-24. In Pakistan, knowledge of five or more methods increases with age, but the difference between the 25-34 and the 35-49 age groups is small. In Yemen the opposite pattern is observed—knowledge of five or more methods decreases with age. However, fewer than 20 percent of married women know five or more methods in any age group, and the age differentials are small.

The age differentials in knowledge of individual methods are also generally small (Appendix B). For most methods in most surveys, knowledge peaks in the 25-34 age group. In sub-Saharan Africa (except Madagascar) younger women are more likely to recognize condoms than women over 35 years of age. In the other two regions, younger women are less likely to recognize condoms than older women, except in Indonesia, Yemen, and Brazil. The differences between the youngest and oldest age groups are generally small for other methods.

Number of Living Children

Earlier studies based on WFS and DHS-I data found no strong, consistent relationship between knowledge of at least one method of contraception and the number of living children that the respondent has, except for a slight tendency for women with no living children to be less likely to know a method than other women (Vaessen, 1980; Rutenberg et al., 1991). The corresponding results from DHS-II surveys presented in Table 3.3 are generally consistent with those earlier findings. In the Latin America/Caribbean and Asia/Near East/North Africa regions (except Pakistan and Yem-

en), where knowledge of at least one method is high, there is little variation by the number of living children the woman has. In Pakistan and Yemen, knowledge of at least one method of contraception increases with the number of living children.

In sub-Saharan Africa, knowledge tends to be lowest among women with no living children. Otherwise, a relationship between contraceptive knowledge and the number of living children exists in some surveys, but the strength and form of this relationship varies. In Burkina Faso, Cameroon, Madagascar, and Rwanda the number of living children appears to have little effect on knowledge of contraception. In Niger, Nigeria, and Senegal, knowledge increases as the number of living children increases. In Tanzania and Zambia, knowledge is lowest among women with no living children, while in Namibia knowledge is lowest among women with five or more living children. The pattern in Malawi is weak, but there is a tendency for knowledge to increase as the number of living children increases, although it drops off slightly among women with the largest families.

When knowledge of five or more methods is considered, the relationship between the number of living children and knowledge of contraception remains similar in sub-Saharan Africa and in Pakistan (Table 3.4). In some countries differentials become more pronounced, and in Zambia the pattern shifts to one of increasing knowledge as the number of living children increases. In the Latin America/Caribbean and Asia/Near East/North Africa regions (except Pakistan and Yemen) differentials tend to widen somewhat, with knowledge generally highest among women with one to four living children. In Yemen, knowledge of five or more methods is uniformly low, and the differentials seen for knowledge of at least one method disappear.

Among individual methods, differentials in knowledge by number of living children are generally small and inconsistent across countries (Appendix B). There is some tendency for knowledge of individual methods to be lowest among women with no living children. For example, knowledge of the pill does not vary much by the number of living children in the surveys in Latin America and the Caribbean, but in most of the other surveys knowledge of the pill is lowest among childless women.

Area of Residence

The percentage of married women who know at least one contraceptive method is higher in urban than rural areas

in every survey except in Colombia where virtually all women know a method (Table 3.3). This finding is consistent with that of Rutenberg et al. (1991) for DHS-I surveys and is in line with expectations. The urban/rural differential is negligible in countries with high levels of contraceptive knowledge but gets wider as the overall level of knowledge in the population declines. In Nigeria, which has the lowest percentage of married women who know at least one method of contraception, urban women are nearly twice as likely as rural women to know a method. In all surveys except Cameroon, Nigeria, and Yemen, at least 90 percent of married urban women know at least one method. In rural sub-Saharan Africa, this level of knowledge is reached only in

Malawi, Rwanda, and Zambia. The urban/rural differentials widen in all surveys for knowledge of five or more methods (Table 3.4). In Madagascar, Niger, and Nigeria, urban women are more than three times as likely as rural women to recognize five or more contraceptive methods, and in Yemen urban women are nearly five times as likely as rural women to have that level of knowledge.

The same pattern is repeated for individual methods (Appendix B), although there are some exceptions. In Jordan, a greater percentage of rural than urban women reported that they know of injections; and in Namibia and Zambia, other traditional methods are known by more rural

Table 3.4 Differentials in knowledge of five or more contraceptive methods

Percentage of currently married women 15-49 who know five or more contraceptive methods, by age, number of living children, residence, and education, Demographic and Health Surveys, 1990-1993

| Country | Age group | | | Number of living children | | | | Residence | | Education | | | Total |
|---|-----------|-------|-------|---------------------------|------|------|------|-----------|-------|-----------|---------------------|-----------|-------|
| | 15-24 | 25-34 | 35-49 | 0 | 1-2 | 3-4 | 5+ | Urban | Rural | No educa- | Secondary or higher | | |
| | | | | | | | | | | tion | Primary | or higher | |
| Sub-Saharan Africa | | | | | | | | | | | | | |
| Burkina Faso | 31.3 | 37.0 | 30.1 | 30.2 | 33.5 | 33.7 | 33.4 | 71.3 | 25.2 | 27.5 | 60.5 | 89.4 | 33.1 |
| Cameroon | 36.3 | 42.4 | 27.7 | 35.7 | 36.6 | 37.0 | 34.3 | 54.3 | 24.5 | 7.4 | 48.3 | 86.5 | 35.9 |
| Madagascar | 20.1 | 30.2 | 28.0 | 20.7 | 28.3 | 30.7 | 24.2 | 66.4 | 18.4 | 6.4 | 17.9 | 66.0 | 26.7 |
| Malawi | 60.1 | 73.9 | 63.1 | 45.7 | 65.6 | 72.3 | 70.7 | U | U | 56.5 | 74.8 | 97.4 | 66.0 |
| Namibia | 46.2 | 52.9 | 45.5 | 50.5 | 55.0 | 49.9 | 39.6 | 68.8 | 35.6 | 24.0 | 39.0 | 78.8 | 48.5 |
| Niger | 23.8 | 27.8 | 24.2 | 19.9 | 23.9 | 26.0 | 30.5 | 62.2 | 19.4 | 23.1 | 46.6 | 90.0 | 25.5 |
| Nigeria | 15.6 | 21.3 | 17.2 | 14.6 | 16.3 | 18.9 | 22.5 | 39.4 | 12.7 | 8.3 | 30.1 | 57.3 | 18.5 |
| Rwanda | 80.9 | 86.7 | 83.8 | 77.0 | 84.1 | 86.6 | 84.8 | 95.2 | 83.9 | 79.4 | 87.8 | 98.3 | 84.5 |
| Senegal | 24.7 | 38.3 | 35.5 | 22.3 | 31.0 | 34.9 | 38.5 | 58.1 | 22.0 | 25.9 | 65.7 | 91.9 | 33.6 |
| Tanzania | 35.0 | 47.4 | 38.3 | 22.2 | 40.6 | 45.9 | 42.6 | 64.6 | 34.0 | 22.8 | 51.7 | 88.2 | 40.6 |
| Zambia | 51.2 | 68.2 | 60.3 | 42.1 | 58.3 | 64.8 | 65.2 | 75.8 | 46.5 | 33.8 | 60.8 | 85.9 | 60.3 |
| Asia/Near East/ North Africa | | | | | | | | | | | | | |
| Egypt | 55.1 | 71.0 | 68.6 | 58.4 | 70.0 | 70.6 | 62.2 | 81.3 | 54.5 | 52.7 | 70.1 | 89.4 | 67.0 |
| Indonesia | 63.3 | 69.2 | 60.7 | 55.0 | 66.6 | 67.0 | 61.8 | 83.7 | 57.0 | 33.8 | 64.9 | 91.5 | 64.7 |
| Jordan | 88.2 | 92.0 | 89.0 | 82.8 | 90.2 | 92.3 | 90.3 | 92.4 | 83.0 | 80.2 | 89.6 | 94.2 | 90.0 |
| Morocco | 65.4 | 74.8 | 73.1 | 64.0 | 74.7 | 76.3 | 70.3 | 86.8 | 61.3 | 66.1 | 90.4 | 96.3 | 72.3 |
| Pakistan | 27.3 | 38.5 | 39.2 | 16.1 | 35.8 | 40.1 | 40.7 | 62.1 | 24.9 | 28.1 | 56.1 | 75.6 | 36.2 |
| Yemen | 18.9 | 18.2 | 16.1 | 17.4 | 18.4 | 15.8 | 18.2 | 50.5 | 10.4 | 12.8 | 46.9 | 74.5 | 17.5 |
| Latin America/ Caribbean | | | | | | | | | | | | | |
| Brazil (NE) | 80.4 | 88.8 | 84.4 | 79.8 | 88.4 | 88.5 | 79.3 | 92.6 | 73.5 | 70.3 | 87.5 | 99.8 | 85.2 |
| Colombia | 86.8 | 95.2 | 92.6 | 88.5 | 94.0 | 93.6 | 88.4 | 96.0 | 84.0 | 71.8 | 89.6 | 97.9 | 92.4 |
| Dominican Republic | 92.9 | 97.3 | 94.6 | 92.5 | 95.8 | 96.8 | 93.3 | 98.0 | 90.8 | 81.7 | 94.8 | 99.4 | 95.3 |
| Paraguay | 75.0 | 83.3 | 79.4 | 78.4 | 82.4 | 84.3 | 72.8 | 88.0 | 70.8 | 60.7 | 75.2 | 93.5 | 80.1 |
| Peru | 74.5 | 86.7 | 83.0 | 80.4 | 87.2 | 85.1 | 73.3 | 92.5 | 58.9 | 43.2 | 73.1 | 96.4 | 82.9 |

U = Unknown (not available)

than urban women. The urban/rural differential in knowledge of other traditional methods tends to be relatively small in many surveys, especially in the Asia/Near East/North Africa and Latin America/Caribbean regions. This finding is consistent with the traditional lifestyles in rural areas.

Level of Education

The relationship between knowledge of contraception and level of education conforms to expectations. The percentage of married women who know at least one method of contraception increases steadily with increasing level of education in all countries except Colombia, where knowledge is almost universal (Table 3.3). The strength of the association is closely linked to the overall level of knowledge, also as expected. In populations with high levels of knowledge, there is little scope for differentials to exist. In contrast, educational differentials are pronounced in populations with low levels of knowledge. For example, in Nigeria only 29 percent of married women with no education know at least one contraceptive method compared with 65 percent of married women with primary education and 88 percent of married women with secondary or higher education. In all surveys except Nigeria, at least 95 percent of married women with secondary or higher education know at least one contraceptive method.

Educational differentials in knowledge become even more apparent when knowledge of five or more methods is considered (Table 3.4). Most notably, in Cameroon, only 7 percent of married women with no education recognized

five or more contraceptive methods, compared to 87 percent of married women with secondary or higher education.

The general pattern is repeated for individual methods (Appendix B). In Egypt and Morocco, knowledge of the pill is virtually universal in both the primary and higher educational groups, and in Morocco, knowledge of injections appears to be slightly lower among women with secondary or higher education than among women with primary education. In Jordan, knowledge of injections appears to decline with increasing education, and in Pakistan, women with secondary or higher education are less likely than other women to mention Norplant. However, in all these exceptional cases the differences are small and may be more attributable to sampling variations than to genuine deviations from expected patterns.

In some countries (Namibia, Zambia, Morocco, Northeast Brazil, and the Dominican Republic), the relationship between level of education and knowledge of unspecified traditional methods also deviates from the strong positive relationship observed for other methods. This finding may reflect in part the lack of probing for these methods in many surveys; educated women may not consider ineffective folkloric methods as true contraceptives and so they may not report them spontaneously. In contrast, particularly strong educational differentials are observed in several surveys for knowledge of some methods. For example, in Cameroon, knowledge of condoms was reported by only 10 percent of married women with no education, but by 90 percent of married women with secondary or higher education.