Trends in Infertility in Cameroon and Nigeria

By Ulla Larsen

An analysis of data from Cameroon and Nigeria reveals that infertility has declined among all age-groups younger than 40 in the decade between the World Fertility Surveys and the Demographic and Health Surveys. The expected number of infertile years between ages 20 and 39 declined from 7.3 to 6.0 in Cameroon and from 5.6 to 4.2 in Nigeria. In addition, the proportion of childless women declined from 12% to 6% in Cameroon and from 6% to 4% in Nigeria. Still, a substantial proportion of women suffer from infertility in both countries—39% of women aged 20–44 in Cameroon and 33% in Nigeria. The age pattern of infertility is similar in both countries, and the prevalence of infertility is associated with a woman's age at first sexual exposure. In Nigeria, for example, the proportion of women infertile at ages 20–24 reaches 15% among those who had intercourse before age 13, but is only 4% among those who postponed sexual activity until after their 19th birthday. Marked regional variations in infertility also exist in both countries. Despite the decline in infertility, the total fertility rate remained stable in Nigeria during the 1980s—at about 6.0 children per woman—while that in Cameroon fell from 6.4 to 5.8 children. (International Family Planning Perspectives, **21**:138–142 & 166, 1995)

Impaired fertility is a well-known public health issue in Africa. Central Africa, regions around Lake Victoria and Lake Chad, and various other locations have been characterized by particularly high levels of childlessness and subfertility.[1] However, the data documenting this regional pattern date back to the 1970s and earlier. Current levels of and trends in fertility impairment in Central Africa are not known because nationally representative demographic data are not available for the 1980s or 1990s.

Such data do exist for selected Sub-Saharan African countries. For instance, 10 countries participated in the World Fertility Survey (WFS) around 1980, and the Demographic and Health Survey (DHS) program has covered more than 20 countries since 1986. A recent study of 17 of these countries found that infertility—the inability of a sexually active woman who is not practicing contraception to have a live birth[2]—is prevalent in all of them.[3] For example, among women aged 30–34, the proportion infertile ranges from 11% in Burundi to 34% in Cameroon. Furthermore, according to that study, in the six countries

for which both WFS and DHS data are available, levels of infertility appear to be either declining (in Cameroon, Nigeria and Sudan) or remaining about stable (in Ghana, Kenya and Senegal).

The etiology of infertility in Africa is fairly well understood; in the majority of cases, the causes are preventable, such as sexually transmitted diseases and infections following childbirth and abortion.[4] Given that health care facilities are limited in Africa, that infertility is difficult and costly to treat, and that resources are scarce, future efforts should therefore focus on preventing infertility.[5]

More knowledge about trends in infertility is crucial to efforts to evaluate the effectiveness of prevention campaigns, assess levels of infertility, implement new prevention interventions, and better understand and predict levels of fertility and population growth. It is beyond the scope of a single article to analyze the patterns of infertility in all of the countries with available demographic data; the study described in this article was restricted to an examination of the trends in Cameroon and Nigeria.

These countries were selected for the following reasons: Cameroon and Nigeria historically shared many cultural and ethnic values, and the establishment of borders between the two countries was fairly arbitrary; at the time of independence, some observers argued that parts

of Cameroon should have been under Nigeria. Population movements between the north of Cameroon and the north of Nigeria are still common.[6] Additionally, both the WFS and the DHS have covered each country, and the data are readily available.[7] Furthermore, in both countries, the prevalence of infertility is high relative to that in most other African countries for which data are available, and the prevalence declined during the 1980s.[8] Finally, the findings obtained have broad-ranging implications because Cameroon and Nigeria count a total population of about 100 million.

It is generally believed that the effectiveness of family planning programs is hampered greatly in populations suffering from infertility acquired through infection or disease. Hence, the success of family planning programs in Cameroon and Nigeria, as well as in other African societies, might be linked to the prevailing patterns of such infertility. This issue is of particular interest in Nigeria, where one state recently registered the first substantial fertility decline in West Africa.[9]

After providing a brief description of the cultural background of Cameroon and Nigeria, this article presents an analysis of recent trends in infertility in both countries, including an examination of the association between women's age at first intercourse and infertility. It offers a discussion of the effects that further reductions in infertility may have on fertility and population growth, and considers fertility preferences and their implications for contraceptive use.

Cultural Background

Cameroon, covering an area of about 465,000 square kilometers, had an estimated population of 10.5 million in 1987.[10] It is bounded by Nigeria to the west, and both countries are situated on the Gulf of Guinea in West Africa. The population of Cameroon is concentrated in the Littoral and Southwest, Center-South and North regions. Northern Cameroon is predominantly Muslim and has largely retained its traditional mode of life. The Littoral and Southwest, West and Center-South regions are more developed economically; these re-

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gions are externally oriented and are mainly Christian. Bantu people and semi-Bantu groups prevail in southern Cameroon; the northern population is more diverse.

Nigeria is one of the largest and most populous countries in Africa, covering about 923,800 square kilometers, with a population of about 88.5 million.[11] More than 250 ethnic groups reside in Nigeria, although the Hausa, Yoruba and Ibo account for about 60% of the population. The Hausa live predominantly in the two northern regions, while the Yoruba and the Ibo tend to live in the two southern regions. Most Nigerians live in the southern regions and around Kano in the north, while the areas in the middle belt are sparsely populated. In general, residents of northern Nigeria adhere to Islam, and those living in the south adhere to Christianity.

Data and Method

The analysis is based on data from nationally representative, multistage demographic surveys of women: the 1978 WFS and 1991 DHS in Cameroon, and the 1981–1982 WFS and 1990 DHS in Nigeria.*[12]

Accurate measurement of infertility requires data for women who were exposed to childbearing—that is, who were sexually active.[13] To assure that the estimates reflected the experience of women engaged in regular sexual activity, the analysis was confined to ever-married women.†

Exposure to childbearing was defined as beginning at the date of first marriage and ending either at the date of last intercourse as reported in the DHS, at the date of interview in the WFS (which did not gather information about date of last intercourse) or, for women who reported that they were practicing postpartum abstinence, at the date of the last birth. Women who reported cessation of sexual activity were excluded from the WFS (in Nigeria, only currently married women were asked about cessation of sexual activity).

An observation period of five years is necessary to distinguish infertile women from women who take a long time to have a child.[14] Hence, the analysis included only women who entered their first marriage at least five years before the survey. For women at any given age (x), it is possible to measure infertility subsequent to marriage or childbirth only if that event occurred prior to age $x-5$.

A woman is defined as infertile from age a and forward if she had her last live birth at age $a-1$ (or she married at age $a-1$ and remained childless), and she is observed at least to age $a+4$. The present study focuses on age at infertility rather than age

at sterility; therefore, no further age corrections need to be made.[15]

Infertility was measured as the proportion of women infertile in five-year age-groups between ages 20 and 44. These age limits were chosen for the following reasons: Age 20 was selected as the lower limit because distinguishing between adolescent subfecundity and infertility is difficult. Age 44 was chosen as the maximum because the DHS did not collect data beyond age 49, and the last five-year observation period would thus begin at age 44. The sample analyzed for Cameroon consisted of 4,431 women who participated in the WFS and 1,920 who took part in the DHS; for Nigeria, the sample analyzed included 5,522 WFS and 4,866 DHS respondents.

Patterns of childlessness in Cameroon and Nigeria also were studied. Because estimates of childlessness may be sensitive to variations in certain reproductive characteristics, such as fecundability,[16] they must be based on a longer period of exposure. The proportions childless are therefore based on all women who entered their first union at least seven years before the survey. Estimates of both infertility and childlessness are based on weighted data.

Results

During the 1980s, the overall prevalence of infertility as measured subsequent to marriage or childbirth declined from 43% to 39% in Cameroon and from 36% to 33% in Nigeria; the reductions were statistically significant up to age 40 (see Table 1). The age patterns of infertility are very similar in Cameroon and Nigeria, and the absolute difference in infertility at a given age in the two countries is about the same in the earlier and the later data.

Did the levels of infertility truly decline, or are the estimated trends caused by biases? Specifically, absences of births due to contraceptive use and sexual abstinence would lead to overestimates of infertility, and if these biases were greater in the earlier surveys than in the more recent ones, false trend estimates would result.

Examination of data on contraceptive use suggests that this factor did not bias the results. First, fewer than 1% of WFS respondents in both countries were current users of a modern contraceptive method. Any upward bias from contraceptive use

Table 1. Percentage (and standard error) of women infertile subsequent to marriage or a live birth, by five-year age-group, Cameroon and Nigeria, WFS and DHS

Age-group	Cameroon		Nigeria	
	1978 WFS (N=4,431)	1991 DHS (N=1,920)	1981–1982 WFS (N=5,522)	1990 DHS (N=4,866)
Total	**43 (.007)**	**39 (.011)**	**36 (.006)**	**33 (.007)**
20–24	20 (.003)	14* (.004)	11 (.002)	8* (.002)
25–29	30 (.004)	22* (.006)	20 (.004)	12* (.003)
30–34	42 (.005)	33* (.008)	33 (.006)	24* (.005)
35–39	54 (.007)	50* (.013)	48 (.010)	39* (.008)
40–44	71 (.010)	70 (.027)	68 (.019)	63 (.019)

*Difference between WFS and DHS significant at p<.05. *Note:* In this table and in Tables 2 and 4, Ns represent unweighted sample size of women aged 25 and older at survey.

would be in the more recent DHS data, which recorded current-use levels of 6–8% in the samples analyzed. Furthermore, in a multivariate analysis of infertility in Cameroon and Nigeria, contraceptive users were found to have low odds of being infertile when compared with women who had never used a modern method.[17] Finally, when all current users of a modern method are classified as fertile at the date of the survey (which could result in an underestimate of infertility because some users might be infertile and not know it), the estimates of infertility remain almost unchanged; the largest difference is three percentage points, for the age-group 40–44 in the Cameroon DHS.

Biases from lack of sexual activity can also be discounted. Estimates of infertility from the WFS samples may be slightly overstated, because the surveys did not ask about the date of last intercourse, and some women may have had no children during an extended period if they were not sexually active. This potential bias could be particularly serious in the data for Nigeria, because the WFS collected information about cessation of sexual activity only for women currently in a union.

In both countries, however, few women were not currently married (6% in Nigeria and 12% in Cameroon), women who experience union dissolution may soon enter a new union, and sexual activity is generally not confined to stable unions. Therefore, infertility resulting from sexual absti-

Table 2. Percentage of women infertile subsequent to marriage or a live birth, by country and region of residence at survey, according to five-year age-group

Region	N	Age-group				
		20–24	25–29	30–34	35–39	40–44
CAMEROON						
East						
WFS	583	21	29	38	49	64
DHS	105	20	27	40	69	90
Center-South						
WFS	887	23	35	46	60	78
DHS	461	14	25	41	62	87
Littoral & Southwest						
WFS	921	14	22	34	50	69
DHS	455	12	21	29	49	72
West						
WFS	864	8	14	23	35	51
DHS	301	5	11	24	36	49
North						
WFS	1,131	28	42	59	68	79
DHS	598	18	25	34	48	67
NIGERIA						
Northeast						
WFS	1,235	14	29	44	58	74
DHS	1,236	14	22	33	41	66
Southeast						
WFS	1,474	7	16	31	51	74
DHS	1,229	5	9	22	38	59
Northwest						
WFS	1,422	19	25	39	48	59
DHS	1,058	9	12	26	42	76
Southwest						
WFS	1,391	5	9	20	35	61
DHS	1,343	3	7	17	32	49

Note: Region of residence at survey was unknown for 45 women in the Cameroon WFS sample.

nence is likely to be negligible, particularly before age 40 (the cessation of sexual activity is practiced mainly among older women). On the other hand, if currently unmarried women were excluded from the analysis, infertility would be slightly underestimated, because infertile women are more likely than their fertile counterparts to be abandoned by their husbands and to experience unstable marital relationships.*[18]

Finally, the possibility of reporting error must be considered as a source of bias. Evaluations of the WFS data for Cameroon and Nigeria have suggested that their quality is reasonable.[19] Analyses of the DHS data quality have suggested that the interviewers tended to misrecord the

birth dates of some children to avoid asking the health questions (which refer to children born within five years of the survey date).[20] Even so, this problem probably rarely causes women to become classified falsely as infertile because the dates of their most recent births have been displaced back in time. Furthermore, this type of reporting error in the DHS would result in an underestimate of the true trends in infertility. Hence, there is no evidence that reporting errors influenced the observed infertility trends in Cameroon and Nigeria.

Regional Variations
Detailed knowledge of the geographic distribution of infertility is needed to better target public health campaigns aimed at preventing and reducing its incidence. Marked regional variations in infertility are apparent in Cameroon (see Table 2). The North had the highest prevalence of infertility in the WFS, as well as the largest absolute declines in infertility at all ages between surveys.[†] In contrast, in the Center-South, Littoral and Southwest, and West regions, infertility declined until about age 35, then remained at the same level or increased at older ages. No inferences can be made about the eastern region because the DHS sample includes too few cases to allow estimation of the proportion infertile.[21] Western Cameroon had the lowest prevalence of infertility in both surveys.

In Nigeria, infertility declined during the 1980s in each region and in each age-group. (The one exception is the increase among the oldest women in the Northwest; the reasons for this anomaly are unclear.) The Southwest had the lowest prevalence of infertility at both survey dates. The Northeast and Northwest generally had the highest levels, even though infertility declined substantially among those younger than 35 in the Northwest. Finally, the DHS data showed the same level of infertility in northeastern Nigeria and the bordering

northern region of Cameroon, and the proportion infertile declined substantially in both regions during the 1980s.

Childlessness
Childlessness reflects etiological factors operating before or at the time of puberty, and is not affected by factors linked to delivery and childbearing; in the absence of disease, up to 3% of all couples never attain the ability to reproduce.[22]

The proportion childless declined from 12% to 6% in Cameroon, and from 6% to 4% in Nigeria between surveys (see Table 3). Virtually none of the childless women practiced contraception; therefore, these proportions are not biased by contraceptive use.

A rather diverse pattern appears when childlessness is estimated by region of residence. Between surveys in Cameroon, the proportion childless declined from 18% to 7% in the North, but remained at 5% in the Littoral and Southwest region. In general, the level of childlessness and the absolute decline are higher in Cameroon than in Nigeria; however, some of the regional estimates for Cameroon should be considered only weak indicators, because they are based on small samples. (Estimates of childlessness based on fewer than 1,000 cases are likely to be affected by sampling variations.[23]) Also, in Nigeria, the Southeast and Southwest regions have such low levels of childlessness (1% from the DHS) that further declines are unlikely. A study of the Yoruba in the Southwest region also found a very low level of childlessness (1%).[24]

Behavioral Factors
The surveys do not provide any information about whether a woman has had a sexually transmitted disease (STD) or pelvic inflammatory disease, or whether she has received treatment for infertility. It is, therefore, not possible to draw any inferences about the specific causes of acquired infertility, or to pinpoint changes in the prevailing disease patterns leading to the documented declines in infertility in Cameroon and Nigeria during the 1980s.

In general, regional differences in infertility may reflect differences in the prevalence of STDs. For instance, STDs are common in northern Cameroon and in northeastern Nigeria.[25] Infertility may have declined in these regions in response to reductions in STDs, but decreases in STDs have not been documented.

Behavioral patterns associated with elevated risks of infertility at a young age may be reflected in variations in infertility across ethnic groups. For example, the DHS data indicate that in Nigeria, the

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*In an analysis of WFS data that was confined to currently married women, the proportion infertile at a given age was only slightly lower (less than three percentage points) than the proportion found in this analysis. (See reference 3.)

†Differences among regional estimates of infertility in the WFS and the DHS were not tested for significance because the samples are relatively small, the data are associated with some reporting error, and the regional findings are being interpreted merely as indicators of the true trends and differentials. It is also unclear whether the regions analyzed cover exactly the same geographic areas in the two surveys.

Table 3. Percentage of women childless, by country and region of residence at survey

Region	N*	%
CAMEROON		
Total		
WFS	4,616	12
DHS	2,059	6
East		
WFS	609	12
DHS	118	9
Center-South		
WFS	886	13
DHS	461	5
Littoral & Southwest		
WFS	873	5
DHS	452	5
West		
WFS	927	5
DHS	314	2
North		
WFS	1,278	18
DHS	714	7
NIGERIA		
Total		
WFS	5,935	6
DHS	5,197	4
Northeast		
WFS	1,387	7
DHS	1,451	7
Southeast		
WFS	1,561	3
DHS	1,260	1
Northwest		
WFS	1,621	11
DHS	1,211	5
Southwest		
WFS	1,366	2
DHS	1,275	1

*Total Ns exceed those in Table 1 because this table includes some women who were younger than 25 at the survey and had first married seven or more years previously. *Note:* Region of residence at survey was unknown for 43 women in the Cameroon WFS sample.

Hausa had higher levels of infertility than other ethnic groups (e.g., 16% at ages 25–29, as against 7–12% among other groups). Hausa women tend to initiate sexual unions at a very young age, and that custom may contribute to the relatively high levels of infertility in the north of Nigeria, where most Hausa live. There is evidence suggesting that women who engaged in sexual activity in their early and mid-teens are particularly likely to suffer from infertility.[26]

The prevalence of infertility is very strongly associated with a woman's age at first sexual exposure in both Cameroon and Nigeria. For instance, according to data from the Nigeria DHS, at ages 20–24, the proportion infertile reaches 15% among women who had intercourse before age 13, but only 4% among those who postponed sexual activity until after their 19th birthday.

During the 1980s, both childlessness and infertility subsequent to a live birth appear to have declined especially among women who initiated intercourse in their early teens. In Cameroon, the expected number of infertile years between ages 20 and 39 declined from 10 to seven for women who had had intercourse before age 16, while it remained at about five for those who began sexual activity after age 19. However, the practice of early teenage intercourse did not decline in either Cameroon or Nigeria; in both countries, about half of the sample analyzed in each survey reported having had first intercourse before age 16. Analyzing the proportion infertile both by age at first intercourse and by region is not possible, because the sample size in each cell becomes too small.

The distribution of women by age at first intercourse and by region suggests that women in the North of Cameroon and in the Northeast and Northwest of Nigeria start sexual relations at much younger ages than women in the other regions. For example, about one-half of women in these regions had become sexually active by age 15, compared with roughly one-tenth to one-quarter elsewhere. Thus, early teenage intercourse in the northern regions of Cameroon and Nigeria may be a strong intermediate determinant of the high prevalence of infertility in these areas. Furthermore, the marked decline in infertility among women who initiated intercourse in their early teens appears to be an important factor behind the trend in infertility.

Parity and Ideal Family Size
More than 80% of respondents in the Nigeria DHS and more than 60% in the Cameroon DHS reported an ideal number of children that was higher than the number they had had (see Table 4). At parities three and lower, at least 93% in both countries reported an ideal number of children that exceeded their parity.

The proportions defined as infertile subsequent to marriage or childbirth are significantly higher in Cameroon than in Nigeria at parities 1–3, while there is no difference among nulliparous women and women with at least four children. Thus, the higher prevalence of infertility in Cameroon is due mainly to more infertility among low-parity women.

Discussion
During the 1980s, the expected number of infertile years between ages 20 and 39 declined from 7.3 to 6.0 in Cameroon and from 5.6 to 4.2 in Nigeria. These declines are not insubstantial; nevertheless, infertility re-

mains a considerable problem in both countries. By comparison, for instance, women aged 20–39 in Togo have 2.7 infertile years, according to data from the 1988 DHS in that West African country.

The World Health Organization defines reproductive health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."[27] In the context of this definition, we are confronted with the fact that in Cameroon and Nigeria, about one-third of women aged 20–44 are unable to have a live birth. Even though infertility has declined in these two populations, there remain major challenges and impediments to reaching the bare minimum of reproductive health described as "the absence of disease or infirmity."

Efforts to further reduce infertility might benefit from taking into account the regional variations in infertility and the strong association with initiation of sexual activity in the early teenage years. For instance, primary health care facilities and family planning programs could disseminate more information about the etiology of infertility. This message should also emphasize that some contraceptive methods (e.g., condoms) can protect against STDs and infertility. This kind of educational program is especially appropriate in the northern regions of Cameroon and Nigeria, where infertility is prevalent and the majority of women initiate sexual relations in their early teens.

Declines in infertility, however, raise concerns about increased population growth. Despite the reductions in infertility our data document during the 1980s, fertility also declined in Cameroon and was stable in Nigeria. The total fertility rate (as measured for the three years preceding each survey) fell from 6.4 to 5.8 lifetime births per woman aged 15–49 between surveys in Cameroon; for Nigeria, the rate was 5.9 births per woman in the WFS and 6.0 in the DHS. This apparent contradiction arises be-

Table 4. Percentage of women infertile subsequent to marriage or a live birth, and percentage reporting an ideal number of children that exceeds their parity, by parity, Cameroon and Nigeria, DHS

Parity	Cameroon		Nigeria	
	Infertile	Ideal> parity	Infertile	Ideal> parity
0	99	100	100	100
1	82	100	64	99
2	54	97	41	98
3	39	93	31	97
4	25	79	26	86
5	25	70	26	81
6–9	27	66	27	83
≥10	34	62	34	87

cause of changes in other proximate determinants of fertility, such as a tendency to reduce the duration of breastfeeding and sexual abstinence after a birth.

However, it is doubtful that further changes in, for example, breastfeeding practices will continue to offset reductions in infertility. And if the level of infertility continues to decline throughout the 1990s, fertility and population growth in Cameroon and Nigeria may increase. The implications of such increases could be especially serious for Nigeria because its population is already so large.

Obviously, efforts to reduce infertility should be combined with family planning programs and increased contraceptive use to curb a rapid rise in fertility. It may be difficult, however, to expand contraceptive prevalence in societies such as these, in which most couples desire more children than they have.

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27. J. Khanna, P. F. A. van Look and P. D. Griffin, 1992, op. cit. (see reference 4), p. 3.

Resumen

El análisis de datos provenientes de Camerún y Nigeria revela que ha disminuido la infecundidad en los grupos de edad de menos de 40 años, durante la década transcurrida entre las Encuestas de Fecundidad Mundial y las Encuestas Demográficas y de Salud. El número de años previsto de infecundidad, entre las mujeres de 20 a 39 años, declinó del 7,3 al 6,0 en Camerún y del 5,6 al 4,2 en Nigeria. Asimismo, la proporción de mujeres sin hijos disminuyó del 12% al 6% en Camerún y del 6% al 4% en Nigeria. Sin embargo, una significativa proporción de mujeres tienen problemas de infecundidad en ambos países—39% de las mujeres de 20–44 años en Camerún y el 33% en Nigeria. La infecundidad, con acuerdo a la edad, es similar en ambos países y la prevalencia de la infecundidad se relaciona con la edad que tiene la mujer en el momento de su primera relación sexual. Por ejemplo, en Nigeria, la proporción de mujeres infecundas de entre 20 y 24 años alcanza al 15% entre aquellas que mantuvieron relaciones sexuales antes de los 13 años, pero es de solamente el 4% entre las que postergaron la actividad sexual hasta después de los 19 años. Asimismo, en ambos países hay marcadas variantes de infecundidad entre una región y otra. A pesar de la disminución de la infecundidad, la tasa global de fecundidad de Nigeria se mantuvo estable durante la década de los años ochenta—en aproximadamente 6,0 niños por mujer—en tanto que en Camerún se redujo de 6,4 a 5,8 hijos.

Résumé

Une analyse de données provenant du Cameroun et du Nigéria révèle que l'infécondité a diminué parmi tous les groupes d'âge de moins de 40 ans dans la décennie entre les Enquêtes mondiales de fécondité et les Enquêtes démographiques et de santé. Le nombre attendu d'années d'infécondité entre 20 et 39 ans a baissé de 7,3 à 6,0 au Cameroun et de 5,6 à 4,2 au Nigéria. En outre, la proportion de femmes sans enfants est passée de 12 à 6% au Cameroun et de 6 à 4% au Nigéria. Une proportion

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élevée de femmes n'en continuent pas moins à souffrir d'infécondité dans les deux pays, soit 39% des femmes âgées de 20 à 44 ans au Cameroun et 33% au Nigéria. Le profil d'âge de l'infécondité est similaire dans les deux pays, et la prévalence de l'infécondité est lié à l'âge de la femme lors des premiers rapports sexuels. Ainsi, au Nigéria, la proportion de femmes infécondes entre 20 et 24 ans s'élève à 15% parmi celles qui ont eu des rapports sexuels avant l'âge de 13 ans, mais se limite à 4% parmi celles qui se sont abstenues de rapports sexuels avant l'âge de 19 ans. Des variations régionales marquées de l'infécondité se retrouvent également dans les deux pays. En dépit de la baisse de l'infécondité, la fécondité cumulée est demeurée stable au Nigéria durant les années 80, à environ 6,0 enfants par femme, tandis que la fécondité cumulée au Cameroun est passée de 6,4 à 5,8 enfants.