WORLD FERTILITY SURVEY

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The Cameroon Fertility Survey, 1978
A Summary of Findings

INTERNATIONAL STATISTICAL INSTITUTE
Permanent Office. Director: E. Lunenberg
428 Prinses Beatrixlaan, PO Box 950
2270 AZ Voorburg
Netherlands

WORLD FERTILITY SURVEY
Project Director: Halvor Gille
35-37 Grosvenor Gardens
London SW1W 0BS
United Kingdom

The World Fertility Survey is an international research programme whose purpose is to assess the current state of human fertility throughout the world. This is being done principally through promoting and supporting nationally representative, internationally comparable, and scientifically designed and conducted sample surveys of fertility behaviour in as many countries as possible.

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This summary is one of a series containing the salient findings of the First Country Reports of the countries participating in the WFS programme. A copy of the report itself, *Enquête Nationale sur la Fécondité du Cameroun 1978: Rapport Principal*, is available for reference at all WFS depository libraries, or may be obtained from the International Statistical Institute, 428 Prinses Beatrixlaan, PO Box 950, 2270 AZ Voorburg, Netherlands, on payment of US$ 10 postage.

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THE CAMEROON FERTILITY SURVEY 1978

A SUMMARY OF FINDINGS

1 THE SETTING

Situated in Central Africa between the latitudes of 2° and 13° north, Cameroon covers an area of 465,000 sq. km. It is bordered to the west by the Atlantic Ocean, to the north and north-west by Nigeria, to the north and north-east by Chad and the Central African Republic, and to the south by Equatorial Guinea, Gabon and Congo.

There are three distinct geographical regions: the equatorial forested south with high rainfall; the high plains, rising to over 1100m, in the west (North-West and Western provinces) and the Adamawa Plateau (North province); and north Cameroon, with a tropical Sahel climate with rainfall diminishing towards the north.

The 1976 census enumerated the population of Cameroon at 7,663,246 (9 per cent resident in Douala and Yaoundé), with a population density of 16.5 to the square kilometre. Forty-three per cent of the population are under 15 and 6 per cent over 60. The overall proportion of females is 51 per cent, but this varies according to age group (54 per cent for the 15-49 age group). Fifty-six per cent of the population aged 10 and over are illiterate (67 per cent of females and 54 per cent of men). The illiteracy rate is higher in rural areas (two-thirds) than in urban areas (one-third) and is lower among the younger generations.

Between 1960/65 and 1976, the birth rate rose (from 43 to 45 per thousand), while the death rate fell (from 23 to 20.4 per thousand), which led to an increase in the population growth rate from 2 per cent to 2.46 per cent. Over the same period, the total fertility rate rose from 5.1 to 6.0 children per woman, and life expectancy from 37.5 to 44.4 years.

The country's economy is still dominated by the primary sector which accounts for 76 per cent of the working population. However, the secondary sector, employing 10 per cent, and the tertiary sector, employing 14 per cent, are growing rapidly.

The population of Cameroon is made up of about 200 tribes, which fall into six major ethnic groups: the Sudanese, Hamites and Semites in the north, the Bantu, Bantoids and Pygmies in the south. It is divided into three major religious groups: Christians in the south, east and west, Muslims in the north, centre and west, and Animists in the north and centre.

2 THE SURVEY

The sampling plan used in the Cameroon Fertility Survey was that of a nationally representative sample selected in four stages. In the first stage, concerning only the rural population, 60 rural arrondissements were selected from a total of 136. The second stage (first stage for the urban sector) consisted of the selection of 246 enumeration areas. Except for the smallest, these areas were divided, in the third stage, into 267 sub-areas to limit the size of the sample of households. The household survey was carried out in all the households found within the sub-areas. At the fourth stage, a number of

households were selected within each sub-area in which all women aged 15-54 would be interviewed. The sampling rate for this fourth stage was calculated for each sub-area so as to ensure a self-weighted sample of women in all the main strata.

The sampling rate was doubled in Yaoundé and Douala and was quadrupled in the East province, but these differences as well as the unequal rates of non-response were taken into account at the tabulation stage by the introduction of proper weighting coefficients. A total of 9137 women between 15 and 54 years were identified for interview. A household questionnaire was completed for each of 40,392 households.

In order to meet the national objectives of the Cameroon Fertility Survey, the two basic WFS questionnaires were adapted, particularly the parts dealing with non-contraceptive factors affecting fertility. To help overcome linguistic problems (there are more than 450 languages spoken in Cameroon), these questionnaires were translated into French and English as well as into twelve local languages which resulted in a coverage of 80 per cent of the sample. For the other languages, interpreters were used.

The survey was carried out by 15 teams organized by province, each team being made up of a team leader, a female supervisor, five women interviewers, and a driver. The survey was planned to last from 15 January to 15 July 1978 but was extended by three weeks in the North-West province and by two months in the North province (owing to transport problems and the low calibre of interviewers in the North).

Data preparation was carried out by the verification, coding and automatic data processing services. The tables of the survey results, completed in Feburary 1982, enabled the main report of the Cameroon National Fertility Survey to be prepared. This document is a summary of the main report.

3 FINDINGS

3.1 NUPTIALITY

To obtain a more realistic appraisal of exposure to risk of pregnancy, the concept of union was preferred to that of marriage, comprising civil, traditional and religious marriages, and free unions. A total of 8221 women, of whom 6593 were in union at the time of the survey, were interviewed. Of the women aged 15-49 in the individual survey, 12 per cent were never married, 5 per cent widowed, 4 per cent divorced or separated and 80 per cent in union. Of those in union, 56 per cent were in monogamous unions, 40 per cent in polygamous unions, and 4 per cent did not state their type of union.

Age at first union

The proportion of women never in a union fell rapidly with increasing age from 47 per cent in the 15-19 age group to 10 per cent in the 20-24 age group and to 1 per cent in the 35-39 age group. A slightly higher proportion in the 40-54 age group (1 to 2 per cent) would appear to be due to inaccurate age reporting and the small numbers in this group. The median age at which 50 per cent of women were in union was 17.2 years. By age 20 the proportion was 71 per cent. The mean age at first union, determined by Hajnal's method, was

17.5 years. A decline in very early unions was observed, associated with increased schooling and urbanization. This mean age at first union varies according to the socio-economic characteristics of the respondents. It is lowest among illiterate women (16.6), increasing with the level of education: 17.8 for women with incomplete primary education, 18.8 for those who completed primary education, and 19.7 for those with secondary or higher education. It is higher among Protestants (17.6) and Catholics (17.9) than among Animists (16.4) and Muslims (15.3).

Age at first union is highest in Douala and Yaoundé (18.5 years as against 16.9 in the rural areas). There is a marked difference between the North province (15.3), associated with educational level and religion, and the six other provinces in which this mean age varies from 17.3 to 18.1 years.

Because of the uncertainty of the dates given by the women interviewed, it was difficult to establish precisely the start of exposure to risk of pregnancy which does not always coincide with the start of the union. In 51 per cent of cases, the start of exposure took place before entry into union; 38 per cent reported having had their first sexual relations before entry into union, and 18 per cent reported having their first birth before entry into union. On the other hand, 14 per cent reported that start of exposure took place at least one year after entry into union; 13 per cent reported having had their first periods and 19 per cent their first sexual relations at least a year later.

Women were defined as exposed to the risk of pregnancy if they had had their first period or their first sexual relations, were not pregnant at the time of the survey, and if their fertility was not permanently affected by sterilization or infertility or temporarily by abstinence or post-partum amenorrhoea. The survey provided the following breakdown:

Had not had first period or first sexual relations	7
Pregnant	10
Infertile	12
Permanent abstinence	1
Post-partum amenorrhoea	18
Post-partum abstinence	7
Exposed women with no sexual relations in preceding week	10
Exposed women with sexual relations in preceding week	35
Total	100

The percentage of women who had had sexual relations in the week preceding the survey varied from 30 per cent for those under 25 to 40 per cent for the 25-44 age group and 27 per cent for those aged 45 and over. The frequency is highest for women in union with the differences according to type of union not significant. However, 25 per cent of widowed, divorced and separated women aged 15-54 and 15 per cent of single women had had sexual relations in the period in question. This demonstrates the difficulty of defining exposure to risk of pregnancy according to whether a woman is in union or not.

Stability of unions

The proportion of unions which are dissolved increases with the time since first union, from 6 per cent for women with less than five years since first union to 38 per cent for those who first got married 25 to 29 years ago. Dissolution becomes less frequent as the level of education increases (27 per

cent of first unions dissolved among the illiterate, 17 per cent among women with incomplete primary education, 9 per cent among women with complete primary education, and 7 per cent among those with secondary or higher education). Muslims have the highest rate (30 per cent), as against 18 per cent for the other religions. The least stable unions are among women who work, particularly outside the agricultural sector, as well as in small towns. On the other hand, in Douala and Yaoundé, the percentage of dissolutions is lower than in the rest of the country.

While dissolution and separation are frequent in Cameroon, remarriage is common too: 65 per cent of women whose first union was dissolved entered a second. Remarriage is most frequent in the groups having the highest rate of dissolution (illiterate women, Muslims). Cameroonian women have on average 1.2 unions in their life (1.5 for those who started their first union more than 30 years ago); 14 per cent of ever-married women have been in union twice or more, and 3 per cent three times or more. In all, women ever in a union have spent 92 per cent of their time in union. This percentage falls as the age of the woman increases (98 per cent for those under 20, 89 per cent for those aged 45-49).

Around 42 per cent of women in union belong to polygamous unions. Of these, 38 per cent are first wives, 42 per cent second wives, and 20 per cent are of rank three or higher. The frequency of polygamy increases with the age of the woman (32 per cent among those under 25, 45 per cent among those aged 35-44) and falls as the level of education increases (45 per cent among those with no schooling, 12 per cent among women with secondary and higher education). Women working in agriculture are more often in polygamous unions (42 per cent) than those who do not work (38 per cent) or who work in another sector (28 per cent). Polygamy is least prevalent in Douala and Yaoundé and the adjoining provinces (Centre-South and Coastal). The highest proportions of women in polygamous unions are in the East (38 per cent), the North (43 per cent) and particularly the West (66 per cent). Polygamy is most common among the Animists (53 per cent) and Muslims (45 per cent), but it remains widespread as well among the Protestants (38 per cent) and Catholics (31 per cent).

3.2 FERTILITY

Cumulative fertility

The mean number of children ever born to women aged 45-49 was relatively low (5.18) compared to other African countries. Within this age group, 15 per cent had never had a child. This percentage is also high among young women, many of whom are not yet in union, and among the oldest, who omitted to report children who died young. It is at a high level for all ages, indicating that primary infertility is widespread in Cameroon.

Age	< 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	All
Mean number of children	0.41	1.63	3.00	4.16	4.87	5.20	5.18	4.20	3.11
Percentage of childless women	69	20	12	10	11	11	15	28	24

Among women aged 45-49, the distribution according to the number of children ever born is as follows:

Number of children ever born	0	1-2	3-4	5-6	7 +	Total
Per cent distribution	15	13	16	18	38	100

The figures are practically identical for women in union. The median age at first birth (the age at which half the women have given birth to their first child) is 19.4, around two years more than the median age at first union. This median age appears to fall among women aged 20-24: 18.8 as against 23.6 years for the 50-54 age group, unless the oldest women underestimated the age of their children.

It may be noted that the number of children ever born before the mother's twentieth birthday increases among women under 35 (1.0 child as against 0.8 for women aged 35-44 and 0.6 for the 45-54 age group). Inaccurate reporting of dates may be the reason for these differences. An indication of the poor quality of the data is the fact that more than 13 per cent of the women reported having had their first birth during the first seven months of exposure.

Infertility affects more than 10 per cent of women aged 30-44: 10 per cent had never been pregnant and 12 per cent had never had a live birth.

Current fertility

Ten per cent of women reported being pregnant at the time of the survey. Bearing in mind the difficulty of recognizing pregnancy in its early stages, the actual proportion is likely to be around 12 per cent.

The general fertility rates according to the mother's age at maternity (average over 3 years) from the individual survey (IS) and according to age at interview of the household survey (HS) are as follows:

Age group	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Total fertility rate
IS	21	194	294	281	221	155	93	33	6.5
HS	5	171	286	256	212	145	76	41	5.9
Census[1]	-	163	291	262	200	154	73	54	6.0

1 Adjusted

The general fertility rate for women aged 15-49 is higher in the individual survey (195 per thousand) and perhaps more accurate than the household survey (175 per thousand). The total fertility rate in the individual survey (6.5) shows a considerable increase over the adjusted value obtained from the 1976 census (6.0) and over that of the estimates for 1964 (4.9).

Examination of these rates revealed an increase in fertility for all age groups in the years preceding the survey. This may be explained by a reduction of sterility due to the improvement of health services and maternity care, and to the gradual disappearance of post-partum sexual taboos. But it is also probable that the increase noted is partly due to less frequent omission of recent births.

Nuptiality and fertility

Premarital fertility is considerable: 18 per cent of ever-married women had had at least one child before their first union, an average of 0.29 children per woman. Premarital fertility shows a positive relationship with age of entry into first union. Only 7 per cent of women first in union before age 15 had had a child before entry into union, but the proportion rises to 50 per cent for women married after age 20 and to 71 per cent for those married after age 25.

The group of women aged 30-34 at the time of the survey shows a slight fall in the number of children ever born with increasing age at first union but the difference only becomes significant for women entering union after 21. Women married before age 15 show a slightly lower figure than those married at ages 15-20. This may be explained by greater physiological subfecundity and more frequent omissions among the young marrying women.

Age at first union	< 15	15-17	18-19	20-21	22-24	25+	Total
Number of children ever born	4.3	4.5	4.4	3.9	2.9	(2.7)	4.2

Single women, had fewer children ever born than women ever in a union: 0.20 against 1.35 for the 15-24 age group and 1.70 as against 3.59 for the 25-34 age group. In this last age group widowed, divorced and separated women had on average 3.2 children. Married women had the most. The differences between monogamous women (3.7) and polygamous women do not appear to be significant, nor do those differences relating to rank of polygamous wife. The decline noted (3.8 for rank one, 3.6 for rank two, 3.4 for rank three and over) is due to the effects of age. The wives of rank three and over are the most recently married, and have the shortest duration of union.

Differentials in fertility

Fertility is affected by the proportion of infertile women in each age group. The smallest proportion of childless women is found among the most educated. Women in small towns show the highest infertility (19 per cent of women aged 35-44). Infertility is slightly lower in Yaoundé-Douala than in the rural areas. Infertility is lowest in the four small provinces in the north-west of

the country, high in Yaoundé and the large provinces, especially the North province which has a large Muslim population. Almost one Muslim woman in four has no children, as against one in six Catholics and one in eight Protestants and Animists.

Higher levels of education and residence in Douala and Yaoundé are factors associated with fewer births. The latter factor is associated with the former, since the proportion of illiterate women is lowest in these two cities. The highest number of births per woman, illustrated through the total fertility rates of women aged 10-39, occurs in the three provinces of the West, North-West and South-West, whereas the women in the North, Coastal and East provinces have the smallest number of children. Christian women have an average of six children; Animists have the most (6.7) and Muslims the fewest (4.8) (see table 1).

3.3 MORTALITY

A double association exists between fertility and mortality. On the one hand, improvements in health and reduction in mortality lead to an increase in fertility, and on the other hand birth control does not take place on a widespread basis until infant mortality falls sufficiently to give children a good chance of survival.

The average number of children born to women in the 45-49 age group is 5.18, of whom 3.68 (71 per cent) are still alive. For those having had at least one child (ie omitting infertile women), the figures are 6.24 and 4.44 (71 per cent), respectively.

The following table shows that the probabilities of a child dying before its first birthday, and before its fifth birthday, have declined considerably over the last 25 years, although they still remain at a high level. The probability of dying for more remote periods before the survey is certainly affected by omissions of older births.

Period before the survey	q_1	q_5
0-4	105.6	195.0
5-9	102.8	193.8
10-14	134.7	242.5
15-19	133.5	240.7
20-24	185.8	291.0

Differentials in mortality

An excess male mortality was observed: 115 deaths before age 1 per thousand male births, as against 94.6 deaths per thousand female births. This excess mortality falls over the following four years. Mortality is higher among children of birth order one or of birth orders over six, and in association with this, among children whose mothers are very young or very old. Twenty-seven per cent of children of birth order eight or higher died as against 17 per cent of children of birth order two.

TABLE 1: FERTILITY DIFFERENTIALS

Background variable	Percentage of ever-married women aged 35-44 with no live birth	Total fertility rate, average of last five years (individual survey)	
		General fertility (10-39 years)	Marital fertility (15-39 years)
Level of education			
No schooling	11	6.4	7.4
Incomplete primary	14	5.9	7.3
Complete primary	7	4.8	6.2
Secondary and higher	3	4.7	6.1
Type of place of residence			
Yaoundé-Douala	9	4.9	6.6
Other urban	19	5.8	7.0
Rural	10	5.9	6.5
Region of residence			
Centre-South	16	5.9	6.9
East	12	5.6	6.7
Coastal	6	5.5	6.9
North	17	5.4	5.7
North-West	4	6.3	6.9
West	6	6.7	7.7
South-West	2	6.7	7.6
Yaoundé	11	4.8	6.5
Douala	7	5.0	6.8
Religion			
Catholic	9	6.0	7.1
Protestant	8	6.0	7.0
Muslim	20	4.8	5.2
Other	6	6.7	6.2
Cameroon	11	5.7	6.5

Infant mortality shows an inverse relationship with the level of education; it is twice as high for children of women with no schooling as for those whose mother has secondary or higher education. A study of the regional differences shows high infant mortality in the provinces of the East and particularly the North, in contrast to the two major cities and the Centre-South province where they are situated. In Douala and Yaoundé, infant mortality is lower than anywhere in the rest of the country, and 60 additional children survive to the age of five there out of a thousand births. Greater infant mortality occurs among children of Animist and Muslim mothers. Roman Catholic women have the lowest rate (see table 2).

TABLE 2: DIFFERENTIALS IN MORTALITY, CALCULATED FROM PROPORTIONS OF CHILDREN DYING (HOUSEHOLD SURVEY) (WOMEN AGED 20-34 - 1972)

Background variable	q_1	$_4q_1$	q_5
Type of place of residence			
Urban	84	77	154
Rural	119	106	213
Region of residence			
Centre-South	89	81	162
East	127	112	224
Coastal	114	102	204
North	135	119	238
North-West	99	90	180
West	112	100	200
South-West	117	105	210
Yaoundé	80	74	147
Douala	82	76	152
Religion			
Catholic	99	90	179
Protestant	106	95	191
Muslim	121	107	215
Animist	167	143	286
Other	128	113	227
Education			
No schooling	130	115	230
Primary	84	77	154
Secondary and higher	60	56	113
Cameroon	113	101	203

3.4 FAMILY SIZE PREFERENCES

The responses of the women to questions about desired family size reflect a pronatalist attitude. The proportion of women desiring no more children is 3 per cent. This very low percentage is due to the structure of the sample which was made up predominantly of young women having had only a few children. The percentage increases with the age of the woman (18 per cent for the 35-39 age group), with the size of the family (9 per cent for women with 6 children), and the duration of the first union (9 per cent for a duration of 15-19 years).

Many women, especially young women, were vague about the ideal size of their family. Of those who gave a numerical response, 15 per cent said they wanted less than 4 children, 28 per cent from 4 to 6 children, and 57 per cent more than 6 children. The average desired family size of 8.0 children varied from 6.5 for 15-19 years old to 8.6 for the 45-49 age group. It is lower among more educated women, those resident in Douala/Yaoundé, and in the East province. On the other hand, it exceeds 10 in the North-West and West (see table 3).

While 23 per cent of women wanted their next child to be a boy and 15 per cent a girl, 61 per cent expressed no sex preference. Fifty-seven per cent of women already having two daughters wanted their third child to be a boy, while 35 per cent of those with two boys wanted to have a girl.

3.5 KNOWLEDGE AND USE OF CONTRACEPTION

Thirty-six per cent of the women interviewed reported knowing at least one method of contraception; 29 per cent knew of a modern method (pill, IUD, condom) and 7 per cent only knew of an inefficient method (periodic abstinence, withdrawal, douche). The highest percentage was among women aged 20-29. Only 31 per cent of all ever-married women aged 15-49 knew of a contraceptive method (as against 60 per cent in Senegal and 91 per cent in Kenya). In Cameroon contraception is better known among women never in a union (49 per cent), especially those with children (65 per cent).

The best known methods are the pill (21 per cent), periodic abstinence (21 per cent), the IUD (19 per cent), withdrawal (14 per cent), the condom (14 per cent). Other methods, including traditional methods, appear to be fairly unknown.

Table 3 shows the variations existing according to different variables. Contraception is little known and even less used. Only 11 per cent of women have used it in the past or are currently using it (3 per cent for a modern method and 8 per cent for an inefficient method). Use at the time of the survey was insignificant, with only 3 per cent of women aged 15-54 reporting use (2 per cent of women without children).

Level of education is a determining factor in both knowledge and use. As the vast majority of educated women live in the towns, highest knowledge and use are found in Yaoundé and Douala. In the West, North-West, Coastal and North provinces, use is virtually nil. Muslim and Animist women are among the least informed about contraception. Women working outside the agricultural sector (in mainly urban employment, requiring a minimum level of education) make most use of contraception, as do women whose husbands have an administrative or clerical job.

TABLE 3: IDEAL FAMILY SIZE, KNOWLEDGE AND USE OF CONTRACEPTION (PER CENT)

Background variable	Ideal size	Knowledge	Ever-use	Current use
Level of education				
No schooling	8.2	19	3	1
Incomplete primary	8.4	55	18	4
Complete primary	8.2	72	29	6
Secondary and higher	6.4	89	54	30
Type of place of residence				
Yaoundé-Douala	7.5	71	31	16
Other urban	8.8	42	8	1
Rural	8.1	29	9	2
Region of residence				
Centre-South	7.6	70	31	5
East	6.6	48	26	11
Coastal	9.3	44	9	3
North	7.1	11	2	1
North-West	10.2	38	3	0
West	10.7	18	9	0
South-West	9.3	45	9	4
Yaoundé	6.9	82	37	14
Douala	7.8	64	27	17
Religion				
Catholic	8.4	51	18	5
Protestant	8.7	44	15	5
Muslim	6.9	13	1	0
Other	8.3	11	2	1
Type of union				
Monogamous	7.9	38	14	5
Polygamous rank 1	8.2	24	7	2
rank 2	8.7	27	6	1
rank 3	8.4	24	4	1
Widowed, divorced, separated	-	45	12	-
Never in a union	-	66	(30)	-
Occupation since first union				
Never worked	7.7	25	6	3
Works in agriculture	8.6	35	11	2
Works outside agriculture	6.4	62	26	13
Occupation of spouse				
Administrative, clerical	8.3	63	27	7
Services, sales	8.4	47	14	5
Agriculture	8.2	23	7	2
Manual worker	7.4	49	14	2
No occupation	(9.1)	28	(3)	2

Contraception is thus known and used by a minority of women, who are educated, live in Yaoundé-Douala and have a higher socio-economic status. It is likely to be used for spacing children rather than reducing the number, for most women want more children. However among those women who do not want more children, 82 per cent have never used contraception and 16 per cent have used it in the past but were not using it at the time of the survey. There would thus appear to be a large unmet need for contraception.

3.6 NON-CONTRACEPTIVE FACTORS AFFECTING FERTILITY

Analysis of non-contraceptive factors affecting fertility was limited to women who had had at least one pregnancy and who were not pregnant at the time of the survey, and, for the closed interval, to women having had at least two pregnancies. Women who had never been pregnant were thus excluded.

Breastfeeding

Breastfeeding affects hormonal regulation and suppresses ovulation, which reduces the period of exposure to the risk of pregnancy. Only 1.2 per cent of the women did not breastfeed in the last closed interval. Full breastfeeding, during which the infant only receives its mother's milk, has a mean duration of 5.8 months. This duration is not affected by the age of the mother but it is by her level of education (6.4 months for women with no schooling, 3.8 months for those with secondary or higher education). Protestant and Catholic women breastfeed for a shorter time (4.8 months) than Muslims (8.2 months) and women of other religions (7.9 months). The shortest duration is for women in Yaoundé (3.5 months). The other regions, except the North (8.6 months), have an average duration of breastfeeding of between 4 and 5 months.

By the end of the fourth month, 46 per cent of women have begun to supplement breastfeeding with other forms of nourishment. The mean duration of the entire period of breastfeeding is 19.3 months. Only 2 per cent of women breastfeed for less than 6 months. After one year, 94 per cent of women were still breastfeeding, 66 per cent at 18 months, 42 per cent at 24 months and 4 per cent at three years. Breastfeeding duration seems to be shorter among younger women. While it is over 20 months for women aged 35-49, it falls to 17.9 months for the 20-24 age group, and to 16.6 months for the 15-19 age group. The duration of breastfeeding declines with education (12.4 months for women of secondary or higher education, as against 20.6 months for illiterate women). The shortest duration is in Yaoundé (14.5 months) and Douala (15.7 months). The longest occurs in the North (20.5), North-West (20.8) and West (23.1) provinces. It is shorter among Catholics (18.0) and Protestants (19.1) than among Muslims (20.1) and women of other religions (22.4 months).

Post-partum amenorrhoea

Post-partum amenorrhoea may be defined as the period of infertility between a birth (or an abortion) and the return of menstruation. The mean duration was 10.1 months. For around 20 per cent of women, periods returned within 3 months, for 50 per cent within 10 months and for 70 per cent within 13 months. For 20 per cent of women, menstruation recommenced after 18 months, for 10 per cent after 24 months, and for just over 1 per cent, after three years. The duration is lower for younger women: 8.9 months for women aged 15-24, as against 10.3 months for the 25-34 age group and 10.6 months for those aged 35-44.

Post-partum abstinence

Post-partum abstinence is the period between the birth of a child and the resumption of sexual relations. This factor is of major importance in Cameroon. A quarter of women have recommenced sexual relations by six months after a birth, and 40 per cent by one year. More than 20 per cent abstained from all sexual relations for more than two years. The average duration of abstinence is 13.4 months, and increases steadily with age, from 9.5 months for those under 20, to around 13 months for those aged 20-35 and more than 14 months for those over 35. The presence of taboos against post-partum sexual relations is influenced by a number of socio-economic factors, particularly education, which has the effect of reducing the duration of abstinence (8.0 months for women of secondary or higher education, as against 14.2 months for women with no schooling). The regional differences are fairly marked: a short duration in the East (8.5 months), in Yaoundé (9.6) and Douala (9.9), and a longer duration in the South-West (15,0), West (18.8) and the North-West (19.2). Muslim women have a slightly shorter duration of abstinence (11.9) than other women. Women in polygamous unions have a duration longer than that of women in monogamous unions (12.3 months) and their duration increases with rank (from 14.1 months for wives of rank 1 to 17.2 months for those of rank 3 or over). The mean duration of abstinence is longer for women working in agriculture (14.2 months) than for those working outside the agricultural sector (11.3 months). The longer the duration of breastfeeding, the longer abstinence lasts. It would appear that women abstain from sexual relations for almost the entire period of breastfeeding. But the youngest women have a shorter duration (1 to 2 months), whatever factors are considered.

Duration of exposure to risk of pregnancy

The mean duration of non-exposure due to amenorrhoea and abstinence is 13.5 months, ranging from 10.0 months for women aged under 20 to slightly over 14 months for women over 30. The total duration of the interval up to conception is around 23 months, ranging from 15.4 months for women aged under 20 to 41 months for women aged 50-54.

The duration of exposure is the period when the woman is exposed to the risk of pregnancy in the last closed interval, ie after amenorrhoea has ceased. Infrequent temporary separations were not taken into account. For women reporting exact dates, the mean duration of exposure is 9.5 months. It varies from 5.4 months for women under 20 to 14.4 months for those aged 40-44 and 27.2 months for those aged 50-54.

4 CONCLUSIONS

Despite a considerable increase in fertility in the course of the last three decades, due to development progress and the improvement in health services which have led to a reduction of sterility, fertility in Cameroon is still at a moderate level, with an average number of chidren ever born of around 5 to 6 at the end of a woman's reproductive period and with 10 per cent of women infertile.

The age of entry into union is early (17.5 years on average) and seems to be decreasing, but marriage dissolution and remarriage are frequent. Polygamy is common (40 per cent of women in union) but does not seem to be a factor in limiting fertility. The start of exposure to risk of pregnancy does not always coincide with the woman's entry into union.

Women in Cameroon have a strongly pronatalist attitude, which is expressed in an ideal family size greater than actual family size and by the low levels of knowledge and use of contraception (3.1 per cent of exposed women were using contraception at the time of the survey). The influence of certain cultural factors, in particular the duration of sexual abstinence after childbirth, linked to breastfeeding, prevents fertility from being too high. The survey results show a great diversity. Women resident in Yaoundé and Douala have a lower level of fertility than women in the rest of the country because of their ready access to health services, information and education. But the rest of the country has considerable regional variations due to different patterns of behaviour of the various ethnic and religious groups.

Infant and child mortality has diminished considerably over the last 25 years but remains very high, and nearly 20 per cent of children die before their fifth birthday. There are, however, considerable variations according to region and level of education.