

Theme Papers

Separate lives, different interests: male and female reproduction in the Gambia

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We report the initial findings of a research programme on the fertility and reproductive health of both men and women in rural Gambia. The reproductive experiences of men and women in the population studied were very different. During the period 1993–97, the total fertility rates were 12.0 for men and 6.8 for women. For men fertility began later, reached higher levels and continued into older ages than for women. Through serial and polygynous marriages, men were able to extend their reproduction beyond what would be possible with one woman. Of the married men interviewed, 40% were married polygynously. Men's fertility preferences indicated that they recognized their reproductive potentials to be greater than those of their individual wives. On average, married men desired 15.2 children for themselves and 7.3 for each wife. In this polygynous population the means available for attaining reproductive goals were different for the two sexes, depending on the separate lives and different interests of men and women.

Keywords: Gambia; reproduction; gender identity, fertility; age factors; sex factors.

Voir page 577 le résumé en français. En la página 578 figura un resumen en español.

Introduction

“It must not be forgotten that there is no known society in which the interdependence and complementarity of the sexes is not embodied in custom and sanctioned by law and morality. To consider the status of either sex without reference to the other is to distort the reality we are trying to understand (1)”.

Among West Africa's polygynous populations the reproductive experiences and interests of men are distinct from those of women. Men appear to want more children than women and, being less constrained by biological factors, are able to achieve larger completed families (2–4). Although it may seem that couples are the logical units for the study of fertility, it is becoming clear that the separate reproductive experiences of men and women need to be understood. We argue that support for high fertility cannot be understood or altered without consideration of the very different expectations and intentions of men and women in the course of marriage, family formation and child-rearing.

In general, national fertility statistics in industrialized countries and data obtained from censuses

and surveys in developing countries refer only to women. Most fertility studies focus on births and intermediate variables such as marriage, breastfeeding, contraception and induced abortion, which have a direct influence on the rate at which women bear children. This approach to fertility has been useful in demographic studies attempting to enumerate births but does not help to explain fertility levels and changes in fertility patterns (5).

Demographic accounts of male fertility are rare (4, 6). National statistics on this subject are scarce, even in countries with good vital registration data and accurate censuses. Paget & Timaeus (7) found only 17 schedules of male age-specific fertility, and only five of them related to Africa. Over the last decade the Demographic and Health Surveys have attempted to include men but they have largely been limited to men's fertility intentions, contraceptive use and knowledge (e.g. 3). Men are most often considered as part of the context in which women's fertility is achieved. Men commonly enter the picture as risk factors for the transmission of infection or as barriers to women's reproductive goals, as studies on contraceptive discordance often imply (5). Men's economic contribution to families is often represented by socioeconomic indicators in models of women's fertility (8).

The lack of basic data on men has hindered the discussion of male fertility and has been a barrier to the development of a more integrated theory on the global fertility transition. The questions that have been asked about fertility have been limited by the concentration on women. Recently, however, there

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have been calls for a greater inclusion of men in demographic theory and reproductive health research (5, 9, 10). Much work on men has focused on contraceptive knowledge, attitudes and practice (e.g. 11, 12). More innovative approaches to men's involvement are also in evidence (e.g. 13, 14). Men are important agents in reproductive decision-making for couples, and their interests in fertility influence marriage behaviour (2, 15, 16). Nevertheless, the absence of fundamental demographic information on men's reproduction precludes a systematic exploration of levels and trends of male fertility or of men's contribution to declines in fertility. Furthermore, little has been done to investigate the connection of male fertility and reproductive behaviour to the reproductive health of men and women.

In polygynous populations, total fertility rates for men have been reported at nearly twice those for women (4, 6, 17). Substantial age differences between spouses are an important feature of such populations and of differences in total fertility rates (17, 18). Comparisons of fertility and fertility desires for men and women in polygynous and monogynous unions are complicated by the past experience of monogyny for those in polygynous marriages and the future possibility of polygyny for those in monogynous marriages. Several approaches have been used to overcome these difficulties (19–21). We report on the experiences of fertility and marriage at the population level for both sexes in the Gambia.

Previous studies and new questions

In the work that has been carried out in the Gambia we see the limitations of the single-sex approach to fertility. Previous studies in 40 villages around Farafenni showed that women held strong views on the proper intervals between births and were concerned about the physiological costs of pregnancy and childbirth. Women recognized their limited capacity to reproduce and were anxious to use their reproductive potential effectively to cement their marriages and social standing (22, 23).

With few exceptions, women described fertility and motherhood as their main sources of security. Childbearing was also known to be associated with health and strength. Among the findings are those outlined below.

- Having children was an essential part of marriage; premarital births were extremely rare. Women felt that their marriages would be threatened by low fertility and long birth intervals.
- There were strongly held views on the proper intervals between births, the median being 30.5 months. These intervals were valued recuperative periods but there was a fear that long intervals strained marital relationships.
- The potential for polygyny or the presence of co-wives in a compound was a source of stress for women.

- Reproduction was important as a means for women to establish themselves in the husband's family (marriage was patrilocal).
- Western contraceptives were rarely used. When they were, the purpose was commonly to space births rather than to end childbearing.

The earlier studies neglected the contribution of men to many of these issues and neglected to draw attention to the divergent patterns of reproduction by men and women in given populations. In an attempt to avoid some of the bias evident in previous work the present study included both men and women. It was conducted in the same 40 villages and set out to describe female and male fertility, paying particular attention to the strategies adopted by men. Comparable data sets were constructed for 1315 men aged 18 years or older and for 1621 women aged 15–54 years. These linked data sets allowed us to compare reports from men with those from women and to describe fertility and marriage patterns for both sexes.

Research methodology

The Gambia, a small country on the West African coast, has a population of just over a million. Beyond the coastal urban area (population ca. 230 000 people), 85% of the population is rural. The main economic activity is subsistence agriculture. The climate is sub-Saharan, with rains from June to October. In 1993, only 38% of the population over the age of 10 years had attended primary school (24). The 1993 national census indicated that there had been large reductions in mortality over the previous 10 years. The infant mortality rate was 84 per 1000 births. Overall life expectancy was 60.0 years for women and 58.3 years for men (25). National fertility rates also showed a decline, the first since 1973, although only from 6.4 births per woman to 6.0 (26).

Study villages

The residents of 40 villages around the town of Farafenni have been under continuous demographic surveillance by the Medical Research Council since 1981. Their populations range from 32 to 1232 persons. None of the villages has electricity, almost all have at least one public pump well, and about two-thirds of the compounds, considered collectively, own a radio (27). The district health teams travel to several of the larger villages in order to hold monthly maternal and child health clinics. The villages are between 32 km east and 22 km west of Farafenni and are linked to the town mainly by donkey cart and bush taxi. Farafenni is one of the largest of the country's 15 provincial towns; in 1993 its population was 20 956. A large health centre in the town cares for patients from the entire district.

In January 1998 the population of the villages was re-censused; 16 164 persons were resident between 1993 and 1997 and 30 962 had been resident

at some time during the surveillance period. The resident population, which comprised 43.1% Mandinkas, 35.6% Wollofs and 20.3% Fulas, was almost exclusively Muslim. The age structure of the study population is shown in Fig. 1.

Research design

Sampling was based on entire villages so as to obtain a high proportion of matching married couples and improved acceptability of the interview in the community. A total of 21 representative villages were chosen on the basis of size, socioeconomic status, distance from Farafenni and ethnic composition. Half the eligible adults in the surveillance population were resident in these villages.

The final questionnaires covered personal details of the respondents, marriage history, pregnancy history with data on mortality or current residence for all live births, proximate determinants of fertility for women, and marriage and fertility intentions in men. For each pregnancy the respondent reported the name of the other natural parent. The men's questionnaire collected information on all wives before moving on to pregnancy history so that reference could be made to marriage history. Men were asked questions separately on extramarital births through a series of questions on extramarital relationships.

The fieldwork was performed between February and June 1998. Successful interviews were conducted with 1315 men and 1621 women who had been in the specified age categories on 31 December 1997. In April 1999 a subsample of 15 men were interviewed in qualitative interviews about their interests in marriage and having children.

Results

Response rates

The overall response rates were 87% for women and 79% for men; 72 persons refused to participate and 26 were physically unable to do so. The large majority of non-responders were either travelling or staying elsewhere during the survey. The interviewers made up to eight return visits to the compounds of men and women who were travelling.

Descriptive statistics for men

The men's descriptive statistics are shown in Table 1. The mean age was 41 years. Only 10% had ever attended formal school. The sample comprised 92% farmers; approximately 12% of the men were working as tradesmen or craftsmen, including tailors, drivers, masons and blacksmiths; almost 9% were working as traders or vendors.

On average, men who had been married at all had been so twice. Of men who had been married, Mandinka men had been married 2.4 times and Fula men 1.6 times. Of the currently married men, 40% were married polygynously at the time of interview: polygyny was least common among the Fula men, at 26%. The men reported on a total of 1985 marriages, 71% of which were current at the time of interview. The men were living with 90% of their current wives. Mandinka men were more likely to have divorced and less likely to be living with their current spouses than men of the other ethnic groups.

The men reported on 6152 live births for which the sex ratio (male:female) was 1.05: 1. On average, fathers were aged 38 years when their children were born. Most men were living with their children, especially their younger children. The men reported that 92% of their children born in the previous five years were living in their compounds and that 78% of their children born in the previous 20 years were still living with them. Of the children born in the previous 5 years, 11% had died. Only one man reported a child born to a woman who was not his wife.

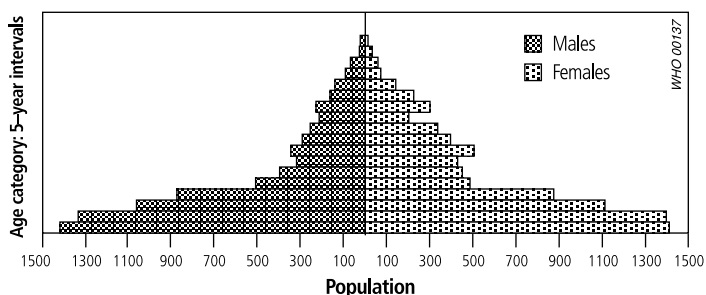
Descriptive statistics of women

The mean age of the women was 31 years; only 16% had never married (Table 2). The low proportions classified as widows or divorcees reflected a high rate of remarriage. At the time of interview, 54% of the married women were in polygynous marriages. Fula women were the least likely to be married polygynously (42%).

Pregnancy was a common experience among currently married women, more than 93% reporting at least one pregnancy, with the mean being 5.2. Only two cases of premarital pregnancy were reported. Birth control other than periodic abstinence was not widely practised. It was reported by 46% of married women that they had abstained from sexual activity with their husbands over the 30 days prior to the survey for a number of reasons (Table 2). Sexually active women were asked whether they had used any means to avoid pregnancy, and 8% of those who had been sexually active during the preceding 30 days reported using either natural or modern contraceptive methods. Sexually active Fula women reported the lowest use of contraceptive use (less than 3%).

The women reported on 1615 marriages, 77% of which were current at the time of interview. No ethnic differences were seen in divorce rates for women. Of the married women, 89% lived with their husbands; Mandinka women were less likely to reside

Fig. 1. Population age structure, by sex, Medical Research Council, Farafenni study villages, 1993–97



with their current husbands than were women of other ethnic groups.

The women reported on a total of 5962 live births with a sex ratio (male:female) was 1.01:1. On average, women were 24 years old when their children were born. Women were less likely than men to report that their children were living with them. Women reported that, of their children who were alive, 83% who had been born in the previous five years and 65% of those born in the last 20 years were living in the compound with them at the time of the interview. Islamic fathers in West Africa are entitled to the custody of their older children after a divorce but it is usual for young children to stay with their mothers. It was therefore somewhat unexpected that children less than 5 years old were more likely to live with their fathers than with their mothers. Among the women's children born during the preceding five years, 11% had died.

Reporting by men

Overall, the men reported the same proportions of stillbirths, live births by birth order, and child deaths as did the women. Men reported a slightly lower proportion of current pregnancies and abortions than women, probably because of the secrecy concerning these events that is maintained by women, who often conceal or deny pregnancies from husbands and co-wives until the second trimester. A matched analysis showed that the same number of live births was indicated by each partner in 65% of those couples where both partners reported on this matter.

Fertility rates

The total fertility rates for women and men during the period 1993–97 were 6.8 and 12.0, respectively. Ethnic differences in fertility rates were small. The sex differences in fertility patterns can be seen in Fig. 2, which shows male and female age-specific fertility rates for the five years preceding the survey. Men's fertility began later, reached higher levels, and extended into older ages than women's.

None of the men aged under 20 years reported live births. Over the period 1993–97, women aged 20–24 years had an annual fertility rate of 272 per 1000, i.e. 27% of these women gave birth each year. Over this period, men in this age group reported a fertility rate of 12 per 1000; men did not attain a fertility rate similar to that of the women aged 20–24 until the age range 30–34 years, for which the rate was 281 per 1000.

The men's fertility rates quickly exceeded those of the women's and at 35–39 years the men had a higher fertility rate than the women at any time during their peak reproductive years. Whereas women's fertility rates were over 200 per 1000 only for 20 years, men's remained over 200 per 1000 for 30 years and exceeded 300 per 1000 for 15 years. Men's fertility peaked at 382 per 1000 when they were 45–49 years of age, indicating that 38% of these men were responsible for a new birth every year. Even for

Table 1. Descriptive statistics of men interviewed

	All men aged \geq 18 years	Mandinka	Fula	Wolof
No. interviewed	1315	571	398	320
Mean age (years) on 31 Dec 1997^a	41	43	40	39
Education (%)				
Attended formal school ^a	10.0	13.1	9.0	4.7
Attended Koranic school ^a	90.3	92.5	83.9	97.5
Occupations (%)^b				
Farmers ^a	91.9	89.3	94.5	93.1
Fishermen ^a	4.4	7.5	2.3	1.9
Traders ^a	8.7	11.9	5.3	7.8
Marabouts ^a	4.0	5.4	4.3	1.6
Alkalos (village head)	1.5	1.2	1.8	1.9
Professionals	1.7	1.6	1.8	1.6
Craftsmen/tradesmen	11.3	7.4	8.0	11.9
Shepherds ^a	5.3	13.0	13.3	4.7
Students	5.4	0.2	3.8	5.0
Retired	5.4	5.4	4.8	6.6
Marital status at interview				
Single/never married	27.0	27.1	23.4	30.9
Married	71.2	70.8	74.1	68.4
Divorced/not married	1.0	1.1	1.8	0
Widowed/not married	0.8	1.1	0.8	0.6
Mean times ever married^a	2.09	2.42	1.64	2.01
Among ever-married ($n = 960$)				
Married polygynously^a	40.2	48.6	26.3	42.4
Among currently married ($n = 929$)				

^a Statistically significant ethnic differences at the $P = 0.05$ level.

^b More than one occupation was possible.

the age range 60–74 years, approximately 10% of men continued to be responsible for a new birth every year.

Marriage patterns of men

Men achieved their very high fertility through both serial and simultaneous marriages. Men married for the first time at an average age of 25 years, nearly 10 years later than the women did, but continued to marry additional wives throughout their lives. At 30–35 years of age, less than 15% of men remained single and by 40–45 years of age nearly all had married for the first time. Muslim men are permitted to have up to four wives at any time. The average age of men at second marriage was 36 years. Among those who married for a second time, the average age at which this occurred was similar in the different ethnic groups. Men's age-specific marriage rates for the period 1993–97 were calculated in a format similar to that used for fertility rates. The total marriage rate

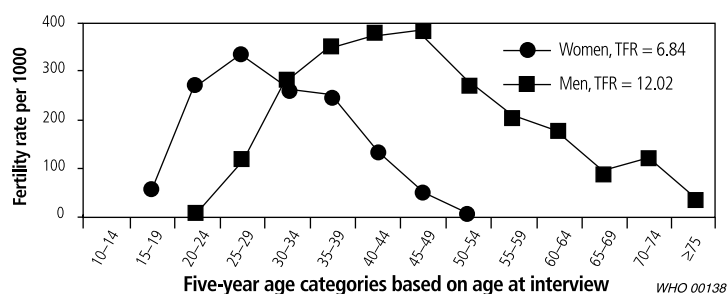
Table 2. Descriptive statistics of the women interviewed

	All women aged 15–54 years	Mandinka	Fula	Wollof
No. interviewed	1621	773	443	377
Mean age (years) on 31 Dec 1997^a	31	32	31	30
Marital status at interview (%)^a				
Single/never married	16.2	18.5	11.3	16.7
Married ^a	80.6	78.3	85.6	79.8
Divorced/not married	0.9	0.9	0.9	1.1
Widowed/not married	2.3	2.3	2.3	2.4
Mean times ever married^a Among ever married (<i>n</i> = 1359)	1.23	1.30	1.14	1.19
Married polygynously (%)^a Among currently married (<i>n</i> = 1307)	54.3	59.0	42.0	61.1
Ever pregnant (%) Among ever married (<i>n</i> = 1359)	93.4	93.8	92.6	93.6
Abstaining from sex during previous 30 days (%)^b Among currently married (<i>n</i> = 1307)	46.0	46.9	45.4	45.8
Using any contraception (%)^b Among sexually active during previous 30 days (<i>n</i> = 704)	8.4	11.9	2.9	9.2

^a Statistically significant ethnic differences at the *P* = 0.05 level.

^b Reasons for abstinence include: breastfeeding (15% of all married women); husband travelling (14%); pregnancy not wanted (4%); sickness (3%); marriage a formality only (3%); others (7%).

Fig. 2. Men's and women's age-specific fertility rates, 1993–97 (TFR = total fertility rate)



indicated that an average man contracted three marriages in his lifetime.

At 30–34 years of age, 43% of the men's marriages were polygynous, and at 50–54 years of age the corresponding proportion was 73% (Table 3). On average, 61% of all marriages at the time of interview were polygynous. Overall, 40% of men were living in polygynous unions. By the age of 35 years more than 20% of the men were married to more than one wife

and by 50 years of age more than 50% were in this situation. The degree of polygyny varied by ethnic group, illustrating the importance of cultural factors in the determination of marriage, fertility and reproductive health. For married Mandinka men overall, 49% were living in polygynous unions, whereas only 26% of the married Fula men and 30% of the married Wollof men were in polygynous unions at the time of interview. Of the men interviewed, 28% had experienced divorce.

As an indication of the intensity of marriage for men, the total woman-years married was calculated for each married man by summing the duration of each of his marriages. For all men, the average number of woman-years married was 30.9. The mean number of woman-years married was time-dependent and age-dependent. For each man the number of woman-years was standardized by time elapsed since first marriage in order to capture the intensity of marriage. The ratio of woman-years married to actual time elapsed since first marriage ranged from close to zero in the case of an immediate divorce to at least four where a man had continuing marriages with four women for his entire married life. The ratio averaged 1.24 for all men, indicating that an average man might have been married continuously to his first wife for 10 years and an additional wife for a further 2.4 years. Thus polygyny enabled men to gain an average of 19% of their woman-years married through additional marriages. Mandinka men had a greater average ratio of woman-years married to the time elapsed since first marriage (1.31) than either Wollof men (1.28) or Fula men (1.13).

Marriage patterns of women

The mean age at first marriage for women was 15 years for all three ethnic groups. At interview it was found that 14% of females aged 15 years and 16 years and over half those aged 19 years were married. Nearly all women aged 25–30 years had been married. At the time of interview, 77% of the marriages contracted by women were continuing; 12% of the women had experienced a divorce. Less than 20% of ever-married women had ended their first marriage and proceeded to marry for a second time. Marriage more than once was reported by 25% of married Mandinka women, 14% of married Fula women and 18% of married Wollof women.

By the age of 30–34 years more than half the women were in polygynous unions. Among Mandinka women in this age range, 62% were married polygynously; the corresponding figures for Fula and Wollof women being 44% and 66%, respectively. Women in polygynous unions reported an average of 1.33 co-wives. The mean number of co-wives in a polygynous marriage was 1.43 for Mandinka women, 1.13 for Fula women and 1.30 for Wollof women.

Men's fertility and marriage expectations

When men were asked how many more children they would like in their lifetime, 36% in each ethnic group

said that this was "up to God" (Table 4). In qualitative interviews, men did not support direct action to limit or achieve a certain level of fertility, and said that they ought to welcome as many children as they were given. An exact number of children was, however, given by 60% of men; it ranged from 0 to 101 and averaged 9.1 (Table 4).

When asked how old they would like to be when they fathered their last child, 23% of men insisted that this was up to God and 19% said they did not know (Table 4). It was probable that many of these men had never thought about this matter before, and interpretation of these results should therefore be cautious. However, the average of the ages mentioned by those men who responded with a definite reply was 68 years, apparently reflecting their willingness to father children until quite old age. Indeed, the age-specific fertility rates indicated that 10% of men at this age were fathering children.

Men were asked if they were interested in marrying again during the following year. The question was worded in order to capture a general interest in marriage, not necessarily to elicit definite plans for marriage (Table 4). An interest in taking on a new marriage was expressed by 35% of the men. However, this would be possible only through an impossibly high rate of marriage. Both single and married men had a strong interest in marriage. Interest in marriage was highest among monogynous men. In qualitative interviews, men explained that while fertility was granted by God, they themselves were responsible for marrying. Men also explained that having children was an important expectation in marriage. The men's statements suggested that, while they were not eager to take actions that would directly shape their fertility, they saw marriage as a means within their control to increase their chances of having many children.

When asked how many more children they would like to have in their lifetime, the married men who gave a numerical response said they desired an average of 8.7 additional children (Table 5). On average, these men wished to have an eventual total of 15.2 children. This figure was high but not unrealistic in relation to the total fertility rate of 12.0 for men over the period 1993–97.

Men were asked how many more children they would like to have with each of their current wives (Table 6). It emerged that they were more willing to state a numerical preference for their wives' fertility than for their own. On average the married men who gave numerical responses desired 3.7 additional children and an overall total of 7.3 children for each wife. Thus men's aspirations in respect of their wives' fertility was only slightly higher than what was achieved, i.e. a total fertility rate of 6.8.

However, men's aspirations in relation to their wives' fertility were much lower than what they desired for themselves, showing that they did not view their own fertility as being limited by that of any particular woman.

Table 3. Distribution of men's current marriages that were monogynous or polygynous at time of interview and proportion of all current marriages that were polygynous, by men's age group

Men's age group (years)	No. of monogynous marriages	No. of polygynous marriages	Total marriages	% of polygynous marriages
18–19	1	0	1	0
20–24	23	0	23	0
25–29	69	10	79	0.13
30–34	88	31	119	0.26
35–39	78	59	137	0.43
40–44	72	84	156	0.54
45–49	51	91	142	0.64
50–54	44	121	165	0.73
55–59	38	127	165	0.77
60–64	32	125	157	0.80
65–69	22	90	112	0.80
70–74	18	53	71	0.75
≥75	20	83	103	0.81
Total	556	874	1430	0.61

Table 4. Men's fertility and marriage intentions^a

	All men aged ≥ 18 years	Mandinka	Fula	Wolof
% wishing to marry within 1 year	34.7	34.7	34.2	35.9
Mean number of additional children desired	9.05	9.52	7.81	9.85
% reporting:				
Refused answer	0.3	0	0.2	0.9
"Up to God"	36.0	36.3	34.7	38.1
"Don't know"	4.1	3.3	5.5	3.1
Mean desired age (years) at birth of last child	68	68	66	69
% reporting:				
"When I die"	0.9	1.4	0.3	0.9
"Stopped now"	6.5	7.4	6.3	0.3
Refused answer	0.5	0.9	0.3	0.3
"Up to God"	22.7	23.1	23.6	21.3
"Don't know"	17.3	18.9	15.3	16.3

^a No statistically significant ethnic differences at the $P=0.05$ level were observed.

Discussion

There was clearly a pronounced contrast between the reproductive lives of men and women in the villages. In West African marriages, men and women assume gender-specific roles that have a direct influence on behaviour and social interaction (28). Men and women operate in distinct spheres that overlap only in limited ways, and their interests in children are

Table 5. Mean numbers of live births and additional children desired, as reported by currently married men who expressed numerical fertility preferences, by men's age group

Men's age group (years)	Mean number of additional children desired	Total mean desired fertility
20–24	8.4	8.9
25–29	9.9	11.3
30–34	11.2	13.7
35–39	14.3	18.0
40–44	12.7	18.5
45–49	8.5	16.8
50–54	9.6	18.4
55–59	5.3	14.5
60–64	7.2	17.4
65–69	3.5	11.2
70–74	2.4	12.3
≥75	3.4	12.7
Total	8.7	15.2

Table 6. Mean numbers of live births and additional children desired for each current wife, as expressed by currently married men who expressed numerical fertility preferences, by men's age group

Men's age group (years)	Mean number of additional children desired with each wife	Total mean desired fertility with each wife
20–24	7.0	7.5
25–29	6.8	8.1
30–34	6.6	8.8
35–39	6.9	10.0
40–44	5.9	10.4
45–49	3.8	9.1
50–54	4.1	8.3
55–59	1.8	6.4
60–64	1.9	6.2
65–69	1.4	5.2
70–74	1.0	6.0
≥75	1.4	5.1
Total	3.7	7.3

shaped by the differences between them (29, 30). It is not customary for couples to communicate explicitly about matters of reproduction (31). This presents an obstacle to the inclusion of men in negotiation and reproductive decision-making, an aim of the post-Cairo agenda (UN International Conference on Population and Development). In West African marriages, men and their kin are granted rights to a wife's reproductive capacity (28). Men express the fear that if their wives had decision-making power in such matters the men's authority would be undermined and their status would be threatened (14).

The synthetic total fertility rate is usually assumed to be higher for men than for women because of the age ranges that are taken into

consideration (32). The gap between men's total fertility rate of 12.0 and women's of 6.8 in these data arises from both shorter birth intervals and a longer reproductive period for men, both of which allow men to achieve higher levels of parity than women (33). Through polygynous marriages, men are able to evade the biological constraints of any single women's fertility limits. The different patterns of fertility indicate that the distinctions of gender in these communities are reflected in reproductive experiences and that cooperation for common goals may not be easily achieved.

Men's fertility preferences show that they recognize their reproductive potential to be greater than that of each of their wives. Given that men are able to increase their exposure time in marriage, or woman-years married, by only 19% through polygynous marriages, these fertility preferences still reflect a considerable pressure on women to contribute to their husbands' personal goals for fertility. Previous studies in the same villages have stressed the importance of the connection between fertility and reproductive health among women in decisions on the spacing and final number of births (9, 10). The high proportion of women abstaining from sexual activity may be evidence of their personal control. The present study shows that men use the vehicle of marriage as the principal means of spreading their reproduction over a wide age range and increasing the total number of their offspring. Unfortunately, tension may arise in gender relations because men have this option, whereas women are limited by their biology. Men's ability to take new wives has the potential to draw attention away from current wives, as the women feared. The high prevalence of divorce in the population may add to women's insecurity in marriage.

While men were reluctant to regard fertility as being within their control, they were much more willing to take personal responsibility for their marriages. Qualitative work showed that while men saw marriage as a means of achieving high fertility they also considered it as a means of reproduction in itself, that is as a way of increasing the number of adult women in a family. Men did not agree that low fertility was a justification for divorce and they recognized a responsibility to provide for each of their wives equally (33). This perhaps offers an approach whereby men could be encouraged to support their wives in matters of reproductive health and fertility.

Conclusion

Our findings demonstrate the need for studies that include both men and women from the outset and show that men and women have vastly different reproductive experiences. The detailed description of men's reproduction is necessary in order to understand fully how reproduction and reproductive interests are negotiated between the sexes. With a view to reducing fertility and improving reproductive

health in West Africa and elsewhere it is essential to understand personal interest in high fertility as well as the means available to both partners for achieving it. Considering only women's fertility would not bring such means to light. We consider that smaller families are unlikely in West Africa until men reduce their aspirations in the area of personal fertility. Special attention should be given to the development of policies aimed at motivating such a change.

Furthermore, it is evident that initiatives on improving the reproductive health of men and women in polygynous societies should begin with a full understanding of the complex processes of marriage, divorce and remarriage, as well as of the existence of parallel partners in socially sanctioned unions. The relationships between men and women

described here were not illicit; there was a strikingly low level of extramarital fertility. Men and women relate to each other in dynamic ways and so interventions and preventive health messages should consider the circumstances of individuals in the changing contexts of their unions. ■

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Résumé

Vies séparées, intérêts divergents : la procréation vue par les hommes et les femmes en Gambie

Le rôle des hommes dans la procréation a retenu l'attention depuis la Conférence internationale sur la population et le développement tenue au Caire en 1994, mais peu de travaux ont été menés pour essayer de savoir ce que ces derniers en pensent vraiment. Nous avons entrepris de décrire ce que représente la fécondité pour les femmes et les hommes d'une population rurale de Gambie où la polygamie est très répandue, en portant une attention particulière aux stratégies adoptées par les hommes. On a construit des séries de données comparables pour 1315 hommes âgés de 18 ans et plus, et pour 1621 femmes âgées de 15 à 54 ans. Des entretiens en profondeur ont également été menés avec un sous-échantillon d'hommes.

Entre 1993 et 1997, les taux de fécondité généraux pour les femmes et les hommes ont été respectivement de 6,8 et 12,0. Chez les hommes, la fécondité a débuté plus tard, a atteint des niveaux plus élevés et a duré plus longtemps que chez les femmes. La fécondité extrêmement élevée des hommes a été attribuée à des mariages multiples et simultanés. Au moment de l'entretien, 40 % des hommes qui étaient mariés étaient polygames. Entre 1993 et 1997, le taux de nuptialité générale chez les hommes indiquait qu'en moyenne un homme se mariait trois fois dans sa vie. Par ailleurs, 28 % des hommes avaient déjà divorcé.

Parmi les hommes auxquels on a demandé combien d'enfants supplémentaires ils souhaiteraient avoir au cours de leur vie, 36 % ont répondu qu'ils s'en « remettaient à Dieu ». S'il s'agit là de la réponse en soi la plus fréquente, 60 % des hommes ont donné un chiffre exact. Les hommes mariés désiraient en moyenne 15,2 enfants au total et 7,3 enfants de chaque femme.

Concernant la procréation, on a observé une opposition marquée entre hommes et femmes. Dans les mariages d'Afrique de l'Ouest, l'homme et la femme assument des rôles différents qui influent directement sur leur comportement et leurs relations sociales. L'homme et la femme opèrent dans des sphères distinctes qui ne se recoupent que de façon très limitée. L'intérêt porté aux enfants par l'homme et la femme est façonné par les différences qui existent entre ces deux sphères. Cela empêche les hommes de participer aux négociations et à la prise de décision en matière de procréation dans les couples, un des objectifs du programme d'action de l'après-Caire.

Les préférences des hommes en matière de fécondité indiquent qu'ils estiment que leur potentiel génésique est supérieur à celui de chacune de leurs femmes. Les femmes quant à elles sont encore soumises à une forte pression pour atteindre les objectifs personnels de leur mari dans le domaine de la fécondité. Pour parvenir à leurs objectifs, les hommes peuvent se servir du mariage, mais les femmes, elles, sont limitées par leur biologie. Malheureusement, cela peut provoquer des tensions dans les rapports hommes-femmes.

Il est manifeste qu'on a besoin d'études dans lesquelles hommes et femmes sont enrôlés dès le début. L'analyse détaillée de la procréation vue par les hommes est nécessaire pour pouvoir bien comprendre comment la procréation et les questions d'ordre génésique se négocient entre hommes et femmes. Si l'on veut réduire la fécondité et améliorer la santé génésique en Afrique de l'Ouest et ailleurs, il est indispensable de comprendre quel est l'intérêt personnel qui pousse à vouloir une fécondité élevée et quels sont les moyens dont disposent les deux partenaires pour y parvenir.

Resumen

Vidas separadas, intereses distintos: reproducción de los hombres y las mujeres en Gambia

El papel del hombre en la reproducción es un tema que ha despertado interés tras la Conferencia Internacional sobre la Población y el Desarrollo, celebrada en El Cairo en 1994, pero es escaso el trabajo realizado para detallar esa experiencia. Decidimos describir las características de la fecundidad femenina y masculina en una población rural de Gambia donde la práctica de la poliginia estaba extendida, prestando especial atención a las estrategias adoptadas por los hombres. Se obtuvieron conjuntos de datos comparables para 1315 hombres de edad ≥ 18 años y 1621 mujeres de 15 a 54 años. Además se llevaron a cabo entrevistas cualitativas con una submuestra de hombres.

Durante el periodo 1993-1997, las tasas totales de fecundidad de las mujeres y los hombres fueron de 6,8 y 12,0, respectivamente. La fecundidad de los hombres comenzaba más tarde, alcanzaba niveles más altos, y se prolongaba hasta edades más avanzadas que entre las mujeres. La muy alta fecundidad de los hombres se explicaba por sus matrimonios sucesivos o simultáneos. El 40% de los hombres que estaban casados en el momento de la entrevista eran polígamos. La tasa total de nupcialidad observada entre los hombres durante 1993-1997 muestra que el hombre medio contraía matrimonio tres veces a lo largo de su vida. Un 28% de los hombres se habían divorciado en algún momento.

Entre los hombres a quienes se preguntó cuántos hijos más querían tener durante el resto de su vida, el 36% respondió que «los que Dios quiera». Aunque esta fue la respuesta única más frecuente, el 60% de los hombres dio una cifra concreta. Como promedio, los hombres casados querían tener en total 15,2 niños, y 7,3 con cada mujer.

Se observó un notable contraste entre la vida reproductiva de los hombres y la de las mujeres. En los

matrimonios que tienen lugar en el África occidental, los hombres y las mujeres asumen funciones asignadas a su sexo que influyen directamente en el comportamiento y la interacción social. Hombres y mujeres actúan en distintas esferas que sólo se solapan parcialmente. Los intereses de los hombres y las mujeres en lo que respecta a los hijos están conformados por las diferencias entre esas esferas. Eso representa un obstáculo para incluir a los hombres en las negociaciones y en los procesos de adopción de decisiones de índole reproductiva en las parejas, lo que constituye uno de los objetivos del programa post-Cairo.

Las preferencias de los hombres en materia de fecundidad muestran que reconocen que su potencial reproductivo es mayor que el de sus mujeres. Las mujeres sufren aún grandes presiones para plegarse a los objetivos personales de su marido en lo tocante a la fecundidad. Los hombres pueden servirse del matrimonio para conseguir sus fines, pero las mujeres se ven limitadas por su biología. Desafortunadamente, ello puede ser causa de tensión en las relaciones entre los sexos.

Existe una clara necesidad de estudios que incluyan tanto a hombres como a mujeres desde el comienzo. Es preciso disponer de una descripción detallada de la actividad reproductiva del hombre para poder comprender plenamente cómo se negocian entre los sexos la reproducción y los intereses reproductivos. Con miras a reducir la fecundidad y a mejorar la salud reproductiva en el África occidental y en otros lugares, es fundamental entender el interés personal por conseguir una alta fecundidad, así como los medios de que disponen los dos miembros de la pareja para satisfacer ese deseo.

References

1. Fortes M. Informants. *L'Uomo*, 1980, **IV** (2): 363.
2. Bankole A, Singh S. Couples' fertility and contraceptive decision-making in developing countries: hearing man's voice. *International Family Planning Perspectives*, 1998, **24** (1): 15–24
3. Ezeh AC, Seroussi M, Raggars H. Men's fertility, contraceptive use, and reproductive preferences. *Demographic and Health Surveys, comparative studies No. 18*. Calverton, MD, Macro International, 1996.
4. Pison G. *Dynamique d'une Population traditionnelle: les Peul Bande (Sénégal Oriental)*. [Dynamics of a traditional population: the Peul group]. Paris, Travaux et Documents, Cahier 99, INED-PUF, 1982 (in French).
5. Greene ME, Biddlecom AE. *From absent to problematic: men in demographic accounts of reproduction*. New York, Population Council, Research Policy Division, 1997 (Working Paper No. 103).
6. Donadjé F, Tabutin D. Male nuptiality and fertility in Southern Benin. In: Locoh T, Hertrich V, eds. *The onset of fertility transition in sub-Saharan Africa*. Liege, IUSSP, 1992.
7. Paget WJ, Timaeus IM. *A relational Gompertz model of male fertility*. London, London School of Hygiene and Tropical Medicine, University of London, 1990 (research paper).
8. Presser H. Demography, feminism, and the social-policy nexus. *Population and Development Review*, 1997, **23** (2): 295–331.
9. Mundigo AZ. *Re-conceptualising the role of men in the post-Cairo era*. Seminar on Men, Family Formation and Reproduction, Buenos Aires, Argentina, IUSSP 1998.
10. Bledsoe C, Guyer JI, Lerner S. *Fertility and the male life cycle in the era of fertility decline*. Oxford, IUSSP/Oxford University Press, 1999.
11. Mbizvo MT, Adamchak DJ. Family planning knowledge, attitudes and practices of men in Zimbabwe. *Studies in Family Planning*, 1991, **22**: 31–38.
12. McGinn T, Bamba A, Balma M. Male knowledge, use and attitudes regarding family planning in Burkina Faso. *International Family Planning Perspectives*, 1989, **15** (3): 84–87.
13. Ngom P. Men's unmet need for family planning: implications for African fertility transitions. *Studies in Family Planning*, 1997, **28** (3): 192–202.
14. Bawah AA et al. Women's fears and men's anxieties: the impact of family planning on gender in northern Ghana. *Studies in Family Planning*, 1999, **30** (1): 54–66.

15. **Dodoo FN.** Men matter: additive and interactive gender preferences and reproductive behavior in Kenya. *Demography*, 1998, **35** (2): 229–242.
16. **Speizer I.** Men's desires for additional wives and children. *Social Biology*, 1999, **42** (3–4): 199–213.
17. **Pison G.** La démographie de la polygamie.[The demography of polygamy]. *Population*, 1986, **41** (1): 93–122 (in French).
18. **Goldman N, Pebley A.** The demography of polygyny in sub-Saharan Africa. In: Lesthaeghe RJ, ed. *Reproduction and social organization in sub-Saharan Africa*. Berkeley, University of California Press, 1989.
19. **Donadjé F.** *Nuptialité et fécondité des hommes au Sud-Bénin*. [Marriage and fertility rates among men in Sud-Benin]. Louvain-la-Neuve, Academia, 1992 (in French).
20. **Speizer I.** A marriage trichotomy and its applications. *Demography*, 1995, **32** (4): 533–542.
21. **Ezeh AC.** Polygyny and reproductive behavior in sub-Saharan Africa: a contextual analysis. *Demography*, 1997, **34** (3): 355–368.
22. **Bledsoe CH et al.** Constructing natural fertility: the use of Western contraceptive technologies in rural Gambia. *Population and Development Review*, 1994, **20** (1): 81–113.
23. **Bledsoe CH, Banja F, Hill AG.** Reproductive mishaps and Western contraception: an African challenge to fertility theory. *Population and Development Review*, 1998, **24** (1): 15–57.
24. *Population Census Reports*. (Volumes 1–10.) Banjul, Central Statistics Office, 1993.
25. **MacLeod WB.** Mortality analysis and evaluation. In: *Population and housing census, 1993*. Banjul, Central Statistics Office, 1998.
26. **Sonko S.** Fertility analysis and evaluation. In: *Population and Housing Census, 1993*. Banjul, Central Statistics Office, 1997.
27. **Hill AG et al.** *Report on the Living Standards Survey conducted in the villages of the MRC main study area, North Bank Division, Republic of the Gambia in June-July, 1996*. Fajara, MRC Field Station, Farafenni, 1996.
28. **Oppong C.** Traditional family systems in rural settings in Africa. In: Berquo E, Xenos P, eds. *Family systems and cultural change*. Oxford, Clarendon Press, 1992.
29. **Caldwell JC.** The demographic implications of West African family systems. *Journal of Comparative Family Studies*, 1996, **27** (2): 331–351.
30. **Frank O, McNicoll G.** An interpretation of fertility and population in Kenya. *Population and Development Review*, 1987, **13** (2): 209–243.
31. **Pictet G, Ouedraogo C.** *Let's talk about it: married couples and fertility decisions in Burkina Faso*. New York, Annual Meeting of the Population Association of America, 1999.
32. **Shryock HS et al.** *The methods and materials of demography*. Washington, DC, US Department of Commerce, Bureau of the Census, 1980.
33. **Ratcliffe AA** *Men's fertility and marriages: male reproductive strategies in rural Gambia*. Doctoral dissertation. Boston, MA, Harvard University, School of Public Health, 2000.