

Men, Marriage and Fatherhood in Kinshasa, Zaire

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Data collected in 1988 from men in a fertility and family planning survey in Kinshasa, Zaire, indicate that age at first sexual activity has declined from 19.6 among men aged 50 or older to 16.6 among those aged 20–29 at the time of the survey. Age at first formal marriage, however, has remained stable over time at about 25 years. Although polygyny is illegal in Zaire, about 8% of currently married men in this study have more than one wife. Marital dissolution is common: Among currently married men with one wife, 42% of those aged 55–60 have been married before. Almost 97% of marriages are formal, with informal marriages most common among young men and unemployed men. Almost 66% of men have fathered a child; that proportion rises from 12% of never-married men without a regular partner to 100% among previously married men with a partner; those who have fathered a child have an average of 5.1 children. Overall, almost 36% of men who are married or who have a partner have fathered a child with a woman other than their current wife or partner; these men have an average of 2.8 such children. (International Family Planning Perspectives, 21:19–25 & 47, 1995)

In recent years, the volume and quality of data available on fertility and family planning patterns and trends in Sub-Saharan Africa have shown a marked increase. Unlike demographic data collection efforts in other developing regions, many of those in Sub-Saharan Africa have included men. Of the Demographic and Health Surveys conducted in Sub-Saharan countries between 1986 and 1993, 11 collected data from male respondents who were either the husbands of female respondents or an independently drawn sample.¹ Some smaller studies in Sub-Saharan countries have also obtained information from men.²

These efforts have been motivated by the perception that a better understanding is needed of male perspectives on fertility, family planning and AIDS, given the considerable empirical evidence that males play a dominant role in decisions regarding childbearing and fertility regulation in traditional Sub-Saharan societies.³ Caldwell and Caldwell⁴ describe what has been termed “the traditional African pattern of male involvement in fertility decision-making” as follows:

The African family structure typically places reproductive decisions in the hands of the husband and the economic burden mainly on the shoulders of the wife.... Thus, when family planning decisions are made, they are likely to be surreptitious decisions by the wife alone or unilateral ones by the husband.

Much of the recent research on males in the region has focused on contraceptive knowledge, attitudes and practices. Less attention has been directed to male nuptiality and fertility patterns and how they shape perspectives on contraception.

Research on the reproductive careers of men in Sub-Saharan Africa is, however, important for several reasons. First, it might provide insights into underlying reproductive decision-making processes that at present are only partially understood. Because of the influences of lineage-based social systems, conventional conceptual models based on the assumption that autonomous (or at least semiautonomous) couples with shared resources and responsibilities are the fundamental unit of decision-making on fertility may not be applicable in many Sub-Saharan societies.⁵ The study of male nuptiality and fertility patterns and their socioeconomic correlates might thus provide valuable insights.

Second, there is reason to believe that the traditional nuptiality patterns that underlie the region’s sustained high levels of fertility may be changing. Recent evidence from some countries suggests that socioeconomic development and the economic

crises of the 1980s may be weakening traditional marital institutions and supports for high fertility.⁶ Although trends in the prevalence of polygyny remain unclear, the prevalence of nontraditional forms of marriage and of childbearing outside of traditionally sanctioned unions appears to be increasing in several Sub-Saharan countries.⁷ A recent study in urban Zimbabwe demonstrated that both the number and the sequence of events leading up to pregnancy or the birth of a child vary considerably from couple to couple along a continuum ranging from traditional to modern, and that a couple’s background characteristics predict their place on the continuum.⁸

These results both illustrate the complexity of prevailing family formation processes and point to the possible weakening of traditional patterns of union formation. In addition, the findings of a recently completed study of population dynamics in Sub-Saharan Africa suggest that information on the reproductive careers of men is crucial to an understanding of the demographic changes that have apparently begun in a number of countries in the region.⁹

The analysis described in this article uses data from a recent fertility and family planning survey in Kinshasa, Zaire, to examine the family formation context within which male contraceptive decisions are made. The survey’s findings on contraception and AIDS have been reported elsewhere.¹⁰ The primary objective of this article is to examine age at first sexual activity and marriage, numbers and types of conjugal unions, numbers of children fathered within and outside of formal unions, and socioeconomic differentials in these characteristics. We also assess the extent to which these patterns may be changing and the short-to-medium-term implications of these changes for men, women and children and for family planning program efforts.

Data and Methods

The survey, which was conducted between January and September 1988, used a stratified, two-stage cluster design to select independent probability samples of men aged 20–60 and women aged 15–49.

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The survey covered all 24 administrative zones in Kinshasa. In the first stage of sample selection, 72 of 251 *quartiers* were randomly selected with equal probability. In the second stage of sample selection, 1,462 *parcelles* (compounds containing one or more households) were chosen on the basis of a systematic random selection procedure. Men and women were interviewed in alternate *parcelles* rather than as pairs from the same households. Using a pretested, structured questionnaire, we conducted interviews with a total of 3,484 women and 3,140 men. Response rates were greater than 95% for both men and women. All interviews were conducted in the local language by an interviewer of the same sex as the respondent.

Because certain zones were oversampled for purposes unrelated to the focus of this article, the data were weighted before analysis. Standardized weights, which assign each observation a weight reflecting its relative probability of selection but do not change the final sample size for the study, were used in the analyses reported on in this article.

Information on men's current marital status and marital history was obtained through a sequence of questions in which respondents were first queried about their current marital or union status.* Respondents who reported being married were asked their number of current wives, the legal status of each marriage and the number of previous marriages. Respondents who reported not being married or in union at the time of the survey were asked about previous marriages, whether they had ever lived with a woman or had a regular partner, and whether they currently lived with a woman or had a partner. Information on recent sexual activity and fathering of children was gathered from all men who reported having had at least one regular sexual partner.

Given the high prevalence of visiting unions in Sub-Saharan Africa,¹¹ the definition of union used in this survey includes noncohabiting conjugal unions and is thus broader than the definition used in most surveys of this type, which tend to define union status based on cohabitation. However, we caution that our definition of union is based entirely on respondents' definitions of "partner," and thus may be picking up some casual sexual relationships along with more stable unions.

We conducted multivariate analyses using multinomial logit, conventional lo-

Table 1. Percentage distribution of men aged 20–59, by current marital and partner status, according to age-group, Kinshasa, 1988

Age-group	N (N=3,140)	Currently married			Previously married		Never married		Total
		1 wife		≥2 wives (N=144)	With partner (N=30)	Without partner (N=76)	With partner (N=636)	Without partner (N=540)	
		Formal (N=1,656)	Informal (N=57)						
20–29	1,340	18.4	3.0	<1.0	<1.0	1.0	41.9	34.3	100.0
30–39	945	72.4	1.4	5.6	1.8	2.9	7.7	8.3	100.0
40–49	604	84.6	<1.0	9.4	<1.0	4.0	<1.0	<1.0	100.0
50–60	251	85.7	<1.0	9.2	<1.0	4.4	<1.0	<1.0	100.0
Mean	na	38.7	28.3	41.4	33.5	39.0	24.7	24.8	33.4

Notes: Percentages may not add to 100% because of rounding; na=not applicable.

gistic or ordinary least squares regression procedures, depending on the measurement scale of the outcome or dependent variable.

Findings

Entry into Conjugal Unions

Table 1 shows the distribution of male respondents aged 20–60, by reported marital status and age at the time of the survey. As the data demonstrate, marriage is nearly universal in Kinshasa, with fewer than 1% of the men aged 40 or older having never been married. The large majority (nearly 97%) of marriages reported by survey respondents were acknowledged as formal (legal) rather than informal marriages (*unions de fait*), which are not recognized under Zairian law. The proportion of formal marriages that began as informal unions cannot be ascertained from the available data.

As in much of Sub-Saharan Africa, men in Kinshasa marry at considerably older ages than do women.¹² The median age at first marriage or union was 24.9 years among men and 18.3 years among women. This difference of 6.6 years is slightly below the regional mean difference of 7.8 years calculated by Casterline and colleagues from World Fertility Survey data.¹³ As demonstrated by Goldman and Pebley,¹⁴ such sizable gender differences in age at first marriage are a demographic prerequisite for polygyny.

Survival analyses revealed no clear trend in median age at first marriage across 10-year age cohorts of either men or women (data not shown), although problems of misdating of past events and uncertainties concerning the exact starting point of marriages in Sub-Saharan Africa noted in other studies¹⁵ may well have obscured actual trends in the present data.

Polygyny, although illegal in Zaire, was reported by approximately 8% of currently married men. Although its prevalence in Kinshasa is relatively low, polygyny in Zaire is more common in rural areas, as it is in most countries in the region.

Among men in polygynous marriages, 94% had two recognized wives. In general, each wife in a polygynous marriage in Kinshasa lives in a separate residence, although the wives of 36% of the polygynous men in our sample resided in the same compound. The survey did not explore the prevalence of semipermanent extramarital arrangements known locally as *deuxième bureaux*, in which the man provides some or all of the support for the woman involved.

Only about 5% of ever-married men were not in a marital union at the time of the survey. However, almost 25% of all currently married men with one wife and more than 42% of those aged 55–60 had been married before (data not shown), evidence that marital dissolution and remarriage are common in this population. Among men reporting serial marriages, 83% had been married twice.

We did not obtain information on the type of marital dissolution from previously married men who had remarried by the time of the survey interview. Among men who had yet to remarry, however, 46% were divorced, 28% separated and 26% widowed. These figures are consistent with evidence from other countries in Sub-Saharan Africa of the relatively high incidence of separation and divorce, as well the high mortality rate among women of reproductive age.¹⁶

Of the men who reported not being married (formally or informally) at the time of the survey, 28% of previously married respondents and 54% of never-married respondents were living with a woman or had a regular partner. When we added these men to those who reported being married or in union, 82% of men of reproductive age interviewed were in some form of conjugal relationship at the time of the survey.

In the following sections of the article, we examine the demographic and socioeconomic correlates of various types of conjugal unions and differentials in sexual activity and fathering of children by union type.

*The response categories for the question were: single, married, separated, divorced and widowed.

Covariates of Marital Status

How do socioeconomic background factors influence marital or union status? Are men with certain characteristics predisposed to certain types of unions? To address these questions, we conducted a series of regression analyses. Because of sample size constraints, we modeled the union formation process in two stages. In the first stage, our primary interest was in ascertaining the factors that influence a man's union status—in a formal marriage (to one or several wives), in an informal union or single but with a partner. In the second stage, our primary interest was in identifying factors that distinguish men with two or more wives from those with only one. Five independent variables were included in the regressions: age, employment, religion, childhood residence and level of education.

In the initial regression shown in Table 2, we considered four marital outcomes: never married and not with a partner (the reference category), never married but with a partner, informal union and formal marriage (to one wife or more than one wife). Given the polytomous nature of the outcome variable, we used multinomial logit regression procedures.

Several variables systematically differentiate among men in different categories. One factor is age. Older men were 30% more likely to be formally married and 20% more likely to be in an informal marriage at the time of the survey. Age did not, however, differentiate between unmarried men with a partner and those without a partner.

The likelihood of being formally married is also strongly related to employment status and occupation. Employed men were about four times as likely as unemployed men to be formally married, but differences among employed men across occupational categories were not significant. In addition, men in commercial or service occupations were twice as likely as unemployed men to have a partner. Employment status and occupation had no significant effect on the odds of being in an informal marriage. The observation of significant age and employment effects is consistent with findings in earlier studies suggesting a strong economic factor in the union formation process,¹⁷ probably associated with the need for men to accumulate sufficient assets to pay brideprice to the family of a prospective wife.

Although the likelihood of being formally married at the time of the survey was not related to place of childhood residence, religion or education when other factors were controlled, these variables do

Table 2. Summary results of multinomial logit regression showing effects of selected demographic and socioeconomic factors on current marital status

Factor	Never-married, with partner (N=636)			Informal union (N=57)			Formal marriage (N=1,800)		
	b	t	OR	b	t	OR	b	t	OR
Age (continuous)	-0.0125	-0.846	1.0	0.1398	4.76***	1.2	0.2801	22.03***	1.3
Employment									
Unemployed	ref	ref	1.0	ref	ref	1.0	ref	ref	1.0
Tech./admin.	0.4410	1.81	1.6	-0.2754	-0.48	0.8	1.4550	6.50***	4.3
Comm./serv.	0.7023	3.37***	2.0	0.2239	0.53	1.3	1.3190	6.56***	3.7
Agric./other	0.2951	1.41	1.3	0.3737	0.99	1.5	1.4690	7.73***	4.3
Religion									
Catholic	ref	ref	1.0	ref	ref	1.0	ref	ref	1.0
Protestant	0.4311	-2.76***	0.7	-1.0900	-2.54**	0.3	-0.0965	-0.59	0.9
Other	0.3690	-2.43**	0.7	-0.3538	-1.09	0.7	-0.0740	-0.46	0.9
Childhood residence									
Kinshasa	ref	ref	1.0	ref	ref	1.0	ref	ref	1.0
Urban	0.3172	1.79	0.7	-1.1690	-2.14*	0.3	0.0375	0.21	1.0
Village	0.7340	-4.36***	0.5	-0.2363	-0.73	0.8	0.0834	0.52	1.1
Education									
Primary	ref	ref	1.0	ref	ref	1.0	ref	ref	1.0
Secondary	0.2860	1.20	1.3	0.4204	0.94	1.5	0.3711	1.70	1.4
>secondary	0.6470	2.39**	1.9	-0.4875	-0.80	0.6	-0.0873	-0.33	0.9

*p<.05; **p<.01; ***p<.001. Notes: All contrasts are against never-married men without a partner (N=540). Log-likelihood = -712 (p<.001).

appear to have influenced the likelihood of being in an informal marriage or having a partner at the time of the survey. Men raised in rural areas, for example, were only half as likely to report having a partner as were men reared in Kinshasa, while men raised in other urban areas were 70% less likely to be in an informal marriage. This would seem to reflect a higher propensity for men reared in Kinshasa to engage in nontraditional patterns of union formation along the lines observed in a recent study in urban Zimbabwe.¹⁸ Catholic men and men with higher levels of education were also more likely to have a partner than were non-Catholic men and men with lower educational levels.

A logistic regression analysis of the effects of age, employment, religion, childhood residence and education on whether formally married men have more than one wife shows results broadly similar to those observed in the analysis of marital status. However (in part because of the small sample of men with more than one wife), only age had a statistically significant effect (data not shown).

In this population, men who took additional wives do not appear to have done so primarily because their first wife produced no children. In a separate analysis (data not shown), we found that the difference between the proportion of men in a polygynous marriage whose first wife did not produce a child and the proportion of childless men with one wife was small and not statistically significant. After controlling for age and duration of marriage,

we found no differences between men with two or more wives and those with one wife in the average number of children born to first wives. Thus, although men in some Sub-Saharan areas take a second wife if the first wife bears no children, we did not observe this pattern in Kinshasa.

Sexual Activity

How do relationships described by respondents as "having a partner" differ from those described as formal marriages or informal unions in terms of sexual activity and childbearing? As Table 3 (page 22) shows, only a handful of respondents, all of whom were younger than 25 and had never been married or in a union, reported never having had sexual intercourse. The mean age at first intercourse for the full sample of men was 17.1 years (compared with 16.8 years for women), with generally minor variations across relationship categories. Men who reported never having been married had a somewhat lower mean age at first intercourse (16.2 years).

Because such men were considerably younger on average than men in other relationship categories (see Table 1), we conducted a life-table analysis to assess whether the lower mean age might reflect cohort differences in age at first intercourse. A decisive trend was apparent, with the reported median age falling in a smooth progression from 19.6 years among men aged 50 or older at the time of the survey to 16.6 years among men aged 20-29 years (data not shown). A comparable cohort effect was not ob-

Table 3. Percentages and means of selected measures of sexual activity and fathering of children, by current marital and partner status

Measure	Total	Formally married					Informal union	Previously married			Never married		
		Total	1 wife		≥2 wives	Total		With partner	Without partner	Total	With partner	Without partner	
			Total	First marriage									≥2nd marriage
Ever had intercourse (%)	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.5	100.0	94.5
Mean age at first intercourse	17.1	17.6	17.7	17.7	17.6	17.3	16.9	17.1	16.2	17.4	16.2	16.0	16.5
Had intercourse in previous month (%)	50.7	65.1	63.5	63.4	64.7	84.7	68.9	19.4	68.0	0.0	30.8	55.8	1.4
Had intercourse in previous week (%)	31.9	44.0	42.3	41.9	44.1	64.9	40.4	13.0	45.6	0.0	14.5	26.0	1.0
Mean coital frequency (previous week)	1.9	2.0	2.0	2.0	2.0	2.2	2.1	2.2	2.2	0.0	1.5	1.5	1.7
Ever fathered a child (%)	65.6	96.1	96.0	95.0	99.7	97.4	87.4	97.5	100.0	97.0	14.4	16.6	11.8

served among women, for whom the mean age at first intercourse for older cohorts was already relatively young. Although these data may be distorted by reporting errors, the pattern is consistent with evidence of increasing levels of sexual activity among adolescent males in other countries of the region.¹⁹ This has been interpreted by some observers as evidence of a weakening of traditional prohibitions against “unsupervised” adolescent sexual activity.²⁰

More pertinent to the issue at hand are the data in Table 3 on recent sexual activity and fathering of children. They suggest roughly comparable levels of recent sexual activity among men who reported having a partner and those in acknowledged marriages or unions. Among previously married men with a partner at the time of the survey, the proportion who reported sexual activity in the month preceding their interview was similar to that proportion among currently married men with one wife (68% vs. 64%), while the comparable proportion among never-married men with a partner was only slightly lower (56%).

Reporting of sexual activity in the week prior to the survey showed a similar pattern. Men in polygynous marriages and informal marriages reported slightly higher mean coital frequencies in the week before the survey than did married men with one wife and never-married men with a partner. Men in polygynous marriages reported more frequent coital activity with second and higher-order wives than with their first wife; for example, they reported a mean coital frequency of 1.2 with second and higher-order wives and 0.9 with their first wife in the week before the survey (not shown).

Table 3 also shows the proportion of men, by marital status, who reported having fathered children and the mean number of children fathered. Because many of the cell sizes were too small to permit

meaningful analysis, we do not report significance levels. The differences by marital status probably reflect differences in age across marital status categories. Still, among never-married men with a partner—the group with the youngest average age—approximately one in six reported having fathered at least one child.

Overall, the data suggest that differentials in levels of sexual activity across relationship categories are relatively modest. Although there are sizable differences in cumulative fertility, the proportion of men who reported fathering children in relationships not characterized by the men themselves as being marriages or unions is not trivial. Although it cannot be determined from the data at hand, some (or even many) of the men who reported having a partner at the time of the survey may have been in the early stages of the sometimes lengthy process of union formation characteristic of many Sub-Saharan countries.²¹ Under such circumstances, survey respondents may well opt not to report such a relationship as a union until its viability has been better established.

Fathering of Children

We turn next to a closer examination of male fertility patterns and differentials by union type. In Kinshasa, marriage is virtually synonymous with having children.

Among ever-married men, 96% reported having fathered at least one child, with a large majority of the remaining men having been married for less than two years (not shown). As Table 4 shows, ever-married men had fathered an average of 5.4 children, with those aged 50–60 years reporting an average of 9.1 children. On average, currently married men with more than one wife had fathered 7.2 children, those with one wife had 5.3 children, and men in an informal union had 2.6 children. Among currently married men with one wife, those in their first marriage reported a lower mean cumulative fertility than those who had been married more than once (4.7 children vs. 6.7 children).

We next conducted multiple classification analyses to assess the extent to which these differentials persist when differences in socioeconomic factors and other proximate determinants of fertility are taken into account. Two sets of results are presented in Table 5. The first analysis includes all men who had ever been married and those who had a partner at the time of the survey, while the second analysis is restricted to men who had ever been married. An additional control for reported age at first marriage is included in the second model. The adjusted figures shown in the table indicate the mean number of children fathered by men in each category of a given

Table 4. Number of men with children and mean number of children, by age-group, according to current marital status

Age-group	Total		Formally married							Informal union	Previously married					
	Total		1 wife					≥2 wives								
			Total		First marriage		≥2nd marriage									
	N	M	N	M	N	M	N	M	N	M	N	M				
All	1,888	5.4	1,784	5.5	1,644	5.3	1,345	4.7	357	6.7	140	7.2	50	2.6	103	4.0
20–29	283	2.0	260	2.0	249	1.9	261	1.6	21	2.4	11	3.6	33	1.7	23	2.3
30–39	761	4.0	719	4.0	666	3.9	573	3.6	122	4.3	53	5.3	13	3.2	42	3.4
40–49	594	7.3	566	7.4	513	7.2	376	7.1	132	7.7	53	8.5	†		28	5.9
50–60	250	9.1	239	9.3	217	9.1	135	8.8	82	9.7	23	10.2	†		10	5.1

†Fewer than 10 cases.

variable when the effects of the other variables considered are taken into account.

In both models, married men with more than one wife had higher levels of cumulative fertility than men in the other relationship categories. Although the differentials decreased somewhat when we controlled for the other variables (particularly age at first marriage or union in the second model), men in polygynous marriages had fathered, on average, almost one child more than men in their second or higher-order nonpolygynous marriage and 1.5 children more than men in an informal union.

We suspect that differences in completed fertility between men with one wife and those with more than one will be larger than the differences in cumulative fertility shown in Table 5. Men in polygynous marriages had higher probabilities of intercourse in both the week and the month before the survey, as well as higher mean coital frequencies (Table 3). They also were significantly more likely to have fathered a child in the 24 months prior to the survey (data not shown), indicating higher levels of recent fertility than men in the other relationship categories.

Among men in other categories, however, differentials in cumulative fertility appear to be fairly modest when adjusted for differences in demographic and socioeconomic background factors. It is interesting that marital dissolution does not appear to permanently reduce the number of children that men father. Among currently married men with one wife, the adjusted mean number of children fathered by those reporting a previous marriage is actually somewhat higher than the corresponding mean among men in their first marriage, suggesting that time lost to marital dissolution tends to be recovered relatively rapidly through remarriage and perhaps fathering of children outside of formal marriage. It remains to be seen, however, whether previously married men who had not remarried at the time of the survey will follow this pattern.

To what extent do men in Kinshasa father children with more than one woman? Although the evidence available to address

this question is limited in some respects, the data shown in Table 6 suggest that the practice is quite common. Approximately 20% of men who were in their first marriage and had only one wife reported having fathered a child with a woman other than their wife; these men had, on average, 1.7 children with women other than their current wife. Among men in a polygynous marriage or an informal union, 38% and 35%, respectively, had fathered children with other women; they had means of 3.1 and 3.2 such children, respectively.

Nearly 88% of currently married men in their second or higher-order marriage and 99% of previously married men who had a partner reported fathering a child with a woman other than their current wife or partner. Some or many of the children reported by these men are likely to have been fathered with a previous wife. If so, this would suggest both that levels of primary sterility are lower than those reported in other central African populations²²

and that a lack of children born by the first wife is not the major cause of marital dissolution in this population. What is clear, however, is that nearly 35% of men currently married or in union reported having fathered children with at least two women as of the survey date, a figure that decreases to only 34% if men in a polygynous marriage are excluded.

Table 5. Results of two multiple classification models showing mean number of children fathered, by selected demographic and socioeconomic variables

Variable	Model 1† (N=2,600)		Model 2‡ (N=1,964)	
	Unadjusted	Adjusted	Unadjusted	Adjusted
Marriage				
≥2 wives	7.23	5.83	7.24	6.19
1 wife				
1st marriage	4.74	4.31	4.76	5.08
≥2nd marriage	6.79	5.13	6.77	5.46
Informal union	2.63	3.96	2.64	4.69
Prev. married/partner	2.75	3.48	2.72	4.08
Prev. married/no partner	4.35	3.56	4.35	4.18
Never-married/partner	0.24	2.28	na	na
	$\epsilon=0.61$	$\beta=0.28$	$\epsilon=0.11$	$\beta=0.03$
Age				
20–29	0.76	1.70	1.79	1.56
30–39	3.51	3.21	3.78	3.97
40–49	7.26	6.61	7.29	7.23
50–60	9.08	8.30	9.09	8.89
	$\epsilon=0.77$	$\beta=0.61$	$\epsilon=0.68$	$\beta=0.66$
Employment				
Unemployed	2.45	4.11	5.12	5.37
Tech./admin.	4.93	4.05	5.43	5.29
Comm./serv.	4.45	3.94	5.11	5.10
Agric./other	4.53	3.68	4.99	4.96
	$\epsilon=0.27$	$\beta=0.04$	$\epsilon=0.05$	$\beta=0.04$
Education				
Primary	6.08	4.04	6.45	5.20
Secondary	3.55	4.01	4.83	5.19
>secondary	2.94	3.68	4.36	4.98
	$\epsilon=0.29$	$\beta=0.04$	$\epsilon=0.21$	$\beta=0.02$
Childhood residence				
Kinshasa	2.83	3.85	4.47	5.05
Urban	3.95	4.10	4.85	5.25
Village	5.49	4.01	5.93	5.23
	$\epsilon=0.31$	$\beta=0.03$	$\epsilon=0.19$	$\beta=0.03$
Religion				
Catholic	3.99	4.01	5.28	5.21
Protestant	4.06	3.89	5.23	5.03
Other	3.72	3.86	4.77	5.15
	$\epsilon=0.03$	$\beta=0.02$	$\epsilon=0.06$	$\beta=0.02$
Age at first marriage				
<25			5.77	5.89
25–29			4.94	4.85
30–34			3.45	3.45
≥35			4.36	3.04
			$\epsilon=0.21$	$\beta=0.24$
R^2		0.531		0.638

†Includes men who were ever-married, in a union or with a partner at the time of the survey.
‡Includes only ever-married (formally or informally) men. Note: na=not applicable.

Table 6. Percentage of ever-married men who reported fathering children with women other than their wife or partner, and mean number of such children, by current marital status

Measure	Total	Formally married					Informal union	Previously married
		Total	1 wife			≥2 wives		
			Total	First marriage	≥2nd marriage			
% fathering child with other women	35.6	34.5	34.2	20.0	87.7	38.3	35.1	98.6
Mean no. of children with other women	2.8	2.7	2.7	1.7	3.5	3.1	3.2	2.8

Discussion

The data gathered for the present study suggest that in contemporary Kinshasa, nontraditional patterns of marriage and fertility co-exist with such traditional elements as a strong underlying economic basis for marriage, polygyny (legal prohibitions notwithstanding), relatively rapid remarriage in the event of marital dissolution, and high levels of fertility. Data gathered for the present study and reported elsewhere also indicate limited use of modern contraceptives by men and their partners, although knowledge of modern methods of contraception and sources of supply is nearly universal among both men and women in Kinshasa.²³

The declining age at first sexual activity among adolescent males and the relatively large number of men fathering children

with more than one woman (aside from those in polygynous marriages) suggest that traditional patterns of union may be breaking down. In Kinshasa, the type of conjugal relationship in which men participate at a particular point in time would seem to be strongly influenced by demographic and socioeconomic background factors. In line with traditional patterns of union formation, men in a formal marriage (whether they have one wife or several) appear in general to be those who have been successful in accumulating human and financial capital. Similarly, the likelihood of unmarried men having a partner is influenced by factors such as place of childhood residence, education and religion.

The data indicate, however, that the fathering of children is not confined to formal marriages nor to relationships characterized by respondents as "unions" of any sort. Nearly 82% of males aged 20–60 appear to have been in some form of conjugal relationship at the time of the survey, although not necessarily cohabiting with a partner. Data showing that levels of recent sexual activity among men vary little by marital status, that one in six men who reported never having been married or in union had fathered at least one child as of the survey date, and that nearly 36% of men currently married or in union had fathered children with at least two women provide further evidence of the loose connection between formal marriage, sexual activity and fertility.

The extent to which these behaviors represent a breakdown in traditional patterns of family formation is, however, difficult to judge from the available data. For example, we cannot determine whether sexual activity and fathering of children among men who reported never having been married or in union reflects the sometimes lengthy union formation process in which the nature of conjugal relationships and perhaps the way in which they are defined by the individuals involved change over time, or a break with the traditional pattern of nearly universal formal marriage.

Similarly, the sizable proportion of men who reported having fathered children with more than one woman may reflect either the emergence of an adaptive strategy in response to the socioeconomic change wherein men (and women) "hedge their bets" by having children with more than one partner or, alternatively, a trend characterized by Caldwell and colleagues as the "destabilization of the traditional sexual system" and by Frank and McNicoll as the "caribbeanization" of African nuptiality.²⁴ As noted by van de

Walle,²⁵ research on Sub-Saharan African nuptiality over the next decade is quite likely to be framed in the context of these competing perspectives.

Our findings suggest that, in contrast to conventional models based on the assumption that reproductive decision-making takes place within autonomous or semiautonomous conjugal units with shared resources and responsibilities, the reproductive decision-making processes in Kinshasa are more complex, at least to the extent that multiple partners, opportunities and obligations are involved in such decisions over the course of a man's lifetime. To what extent are conjugal relationships with more than one woman part of strategies designed to minimize the risk of failure to reach reproductive aspirations because a single wife is unable to produce the desired number of children?²⁶ What role does the high rate of marital dissolution play in reproductive decision-making? To what extent is the decision-making process influenced by high rates of mortality among women of reproductive age, a question that is of increasing significance given the AIDS epidemic in parts of Africa. These are important questions that require further study.

A number of important implications emerge from the nuptiality and fertility patterns and trends observed in Kinshasa. One point of interest concerns the socioeconomic fate of women bearing children outside of sanctioned unions and of the children born as a result of such unions. Although the concept of illegitimacy has long been viewed as having limited applicability in the context of African nuptiality regimes, there is nevertheless evidence that the loose economic attachment to the male in nonsanctioned unions has potentially adverse consequences for women and children.²⁷ Although children born before the marriage process is completed and to a lesser extent those born outside of formal unions have traditionally been desired by men in the region, recent evidence suggests a growing trend toward marginalization of informal unions and the children resulting from them.²⁸ If so, the data gathered for the present study indicate the potential for a sizable population of "marginal" women and children to emerge in Kinshasa.

In terms of implications for family planning programs, the recent research emphasis on understanding the male perspective on contraception would seem well founded on the basis of the results of this study. In Kinshasa, men apparently have sexual relations and children with

multiple women over the course of their reproductive years; thus short-term efforts to motivate men to use contraceptives with at least casual sexual partners on public health grounds would seem well worthwhile. Efforts to increase the practice of contraception to limit births are, however, likely to be successful only after changes in demand for children have taken hold in Zaire. To date, there is little evidence that such changes have begun.

Adolescent males are a particularly important target for short-term family planning program efforts. Rising levels of male adolescent sexual activity in Kinshasa and apparently elsewhere in Sub-Saharan Africa would seem to portend growing numbers of children born to young women, many in nonsanctioned relationships. Some observers have suggested, however, that this trend might be counterbalanced by increasing incentives for adolescent females to avoid early pregnancies to take advantage of growing educational and employment opportunities.²⁹ How these apparently conflicting trends will play out is certain to be closely scrutinized in the coming years.

Finally, the results of the study reinforce the need for improvements in survey research in the definition and measurement of marriages and unions in Sub-Saharan Africa. Anthropologists have long been critical of survey research undertaken in developing country settings for oversimplifying cultural realities through the imposition of "imported" and often irrelevant classification schemes pertaining to phenomena such as marriage.³⁰ In Sub-Saharan Africa, an important challenge in future survey research is to better capture the many forms of conjugal unions. The Demographic and Health Surveys have attempted to overcome the problem of significant levels of sexual activity and childbearing outside of formal unions by defining unions on the basis of cohabitation. Given the prevalence of "visiting" and "outside" unions in Sub-Saharan Africa, however, even this fairly liberal treatment of "unions" needs to be broadened. In addition to the use of responses to questions about recent and regular sexual activity and perhaps intentions with respect to union formation with current sexual partners, proposals to classify survey respondents by using information on the extent to which various steps in the union formation process characteristic of a particular culture have been reached³¹ merit consideration and further testing. Finding better ways of capturing the nuances of family formation in surveys and inte-

grating conventional survey and ethnographic data more effectively will be important steps in deepening our understanding of the dynamics of demographic change in Sub-Saharan Africa.

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Resumen

Datos recabados en 1988 de hombres que participaron en una encuesta de fecundidad y de planificación familiar realizada en Kinshasa, Zaire, indican que la edad de la primera relación sexual ha disminuido de 19,6 años entre los hombres de 50 años o mayores, a 16,6 años entre aquellos de entre 20 y 29 en el momento en que se realizó la encuesta. Sin embargo, se mantuvo estable la edad del primer matrimonio—a los 25 años. A pesar de que la poligamia es ilegal en Zaire, este estudio revela que aproximadamente el 8% de los hombres actualmente casados tienen más de una esposa. Es común la disolución del matrimonio: entre los hombres actualmente casados con una sola esposa, el 42% de los de 55 a 60 años habían estado casados anteriormente. Casi el 97% de los matrimonios son formales, y los matrimonios informales son más comunes entre los jóvenes y desempleados. Casi el 66% de los hombres han sido padres; esta proporción aumenta del 12% de los hombres que nunca habían contraído matrimonio y que no tienen una pareja regular, al 100% entre los que estuvieron previamente casados y que tienen pareja; aquellos que se han procreado tienen un promedio de 5,1 hijos. En general, casi el 36% de los hombres casados o que tienen pareja han tenido un hijo con otra mujer que su actual esposa o compañera; estos hombres tienen un promedio de 2,8 hijos de este tipo.

Résumé

Les données recueillies en 1988 parmi les participants masculins à une enquête de fécondité et de planification familiale menée à Kinshasa, au Zaïre, indiquent une réduction de l'âge à la première activité sexuelle, de 19,6 ans parmi les hommes âgés de 50 ans et plus à 16,6 ans parmi ceux âgés de 20 à 29 ans au moment de l'enquête. L'âge au premier mariage officiel, cependant, est resté stable (environ 25 ans). Bien que la polygamie soit interdite au Zaïre, en-

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viro n 8% des hommes mariés au moment de l'enquête avaient plus d'une épouse. La dissolution du mariage est courante: parmi les hommes mariés à une seule épouse, 42% de ceux de la tranche d'âges de 55 à 60 ans avaient déjà été mariés. Près de 97% des mariages ont

été sanctionnés par une cérémonie religieuse ou civile, les mariages informels étant les plus fréquents parmi les hommes jeunes et parmi les travailleurs sans emploi. Près de 66% des hommes sont pères d'un enfant au moins, la proportion passant de 12% parmi les hommes célibataires (jamais mariés) sans partenaire régulière à 100% parmi ceux déjà mariés et

ayant une partenaire. Le nombre moyen d'enfants, par père, est de 5,1. Dans l'ensemble, près de 36% des hommes mariés ou qui ont une partenaire régulière ont engendré un enfant avec une femme autre que leur épouse ou partenaire actuelle; en moyenne, ces hommes ont engendré une moyenne de 2,8 enfants en dehors de leur union ordinaire.