MARRIAGE AND FERTILITY IN AFRICA*

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Introduction

The process of social and economic transformation associated with industrialization has in all countries resulted in wide ranging alterations in the structure and functions of the family. Despite these changes, the family has displayed a remarkable resilience and ability to adjust. Its functions, which vary from society to society, invariably include procreation, socialization, mutual affection and various productive activites. In all known human societies, the family operates within socially prescribed rules and norms which among other things re-inforce its existence and relative stability. Consequently, it has been normative practice in most societies to bear children within a socially recognized and acceptable family unit usually defined in terms of a marital union between the parents concerned. Although cohabitation and single parenthood without previous marriage is becoming common enough to have received social recognition both in Western Europe and among developing countries a critical feature of marriage in African societies is parenthood which is invariably perceived as a sine qua non for the attainment of full development as a complete person to which all males and females aspire.

The central role of the family in reproduction, socialization, economic and social activities was emphasized in two resolutions of the World Population Plan of Action which among other things recommended the protection of the family by appropriate legislation and urged that marriage be entered into only with the free and full consent of intending spouses. Marital status occupies a central position in population dynamics and affects fertility, mortality and migration. It is a demographic charactertistic involving biological characteristics which are related to social, economic, legal, and in many cases, religious aspects.

The timing and frequency of marriage constitute significant aspects in mechanisms for regulating reproductive behaviour. Although empirical evidence from societies of differing economic, social, racial and geo-political backgrounds shows that childbearing is not, in practice, a monopoly of the married couple and that a significant number of children are born to women who do not consider themselves married[1/], the marital union is generally considered the "socially approved" institution for procreation in most human societies.

Analysis of fertility differentials often have to examine marital patterns and differences in age at first and subsequent marriages and the influence of education and occupational status etc. on the age and duration of first marriage. A major problem related to analysis of this nature, relates to variation in practices and concepts of what constitutes a marital union and when exactly it starts. Furthermore, after the marriage act the resulting family composition in one society may be significantly different from the family organization in another. This difference tends to affect women's roles both in the way they fulfil their reproductive functions and during the different phases of the domestic cycle. In this context, it is worth noting that functional boundedness of the conjugal family in different areas of behaviour varies widely both within and between cultures. Thus the basic demographic requirement for the establishment of rules of residence and household composition which form the structure of censuses and surveys may not produce actual co-existence patterns which correspond to the researchers' definition. The effect of this variation is particularly significant in African societies in which there is considerable delegation of childcare responsibilities among members of the extended family system. These members may in some cases include co-wives if the marital union is polygamous. Where this is the case, the resulting household and family structural interrelationships become even more complex.[2/]

1/ Central Bureau of Statistics, Nairobi, Kenya Fertility Survey 1977-1978 first Report Vol. 1, page 93. This study indicated that 23 percent of all Kenya women had reported a pre-marital birth. The Lesotho fertility survey also reported some evidence of premarital fertility.

2/ The Kenya Fertility Survey, 1977-1978, estimated that 30 percent of all married women aged 15-45 were in polygamous unions. The incidence was 8.5 percent in Lesotho. A much higher percentage was reported in the Senegal Fertility Survey, 48.5 percent.

Analytical interest in the study of marriage and fertility focuses more on women than men. Although reproduction necessarily involves males, childbearing is biologically limited to women during the period from menarche to monopause. This period is further reduced by many factors which affect age at first marriage, marital composition and duration and practices which prevent or regulate childbearing.

World Fertility Survey (WFS) data from Kenya, Lesotho and Senegal are used along with survey data from African countries to assess the relationships between fertility on the one hand and age at first marriage, marital composition and marital duration on the other. In the first part of this paper we examine the relationship between age at first marriage and fertility highlighting similarities and differences in the countries studied. In the second part, the analysis focuses on the relationship between fertility and current marital status. The analysis assesses the effects of marital duration on mean parity, examines the contribution of this factor to reported levels of fertility in Kenya, Lesotho and Senegal. Relevant data from other African countries are also used to support the findings from WFS data. A fourth part of the paper assesses the relationship between polygamy and fertility.

Age at first marriage and fertility

The assertion that age at first marriage signals a very significant increase in the probability that a woman will start childbearing is particularly relevant to African societies in which marriage is contracted as some legalized starting point for reproduction. Many studies have suggested that the age at first marriage in the so-called natural fertility societies of tropical Africa is very low and that women in these societies start childbearing soon after menarche. Unfortunately, most of these studies are not very specific on what age at first marriage is too young. Thus figures quoted have ranged from 17 years to 25 years with no indication of what would be considered an adequate age at first marriage 1/.

1/ J.C. Caldwell, - The Persistence of High Fertility Vol. 1, Canberra 1977,
- Population Growth and Family change in Africa, Australian National University Press, 1968.

The estimation of age at first marriage for most African societies has in past studies been rendered difficult by the well-known problems of age misreporting and uncertainty about the time when marriage starts. Thus, one does not know for certain how much of the 5 years difference in average age at first marriage for Algeria, 18.4 years and France, 23 years, was due to errors in age reporting in Algeria 1/. However, the combination of early marriage and very high proportions married among women aged 20-50 years underlines the reproductive potentiality of the "natural" fertility societies of Tropical Africa.

Although recent data from these societies indicate that early and universal marraige is common in these societies, there is convincing evidence that age at first marriage is increasing. The data presented in Table 1 indicate mean ages at marriage for selected African countries.

Table 1: Singulate mean age at first marriage computed from different studies in Africa

Area/Country	Singulate mean age at marriage in years
Kenya	19.9
Lesotho	19.6
Libya	17.9
Mali	18.1
Senegal (1978 Fertility Survey)	17.9
(1976 Population Census)	19.0
Lusaka (Zambia)	19.9
Somalia (Settled Population)	20.3
(Nomadic Population)	18.6

Sources:
- ECA Population Division, Marital Composition and Fertility: Kenya and Lesotho ECA/PDPWP/1981/7
- ECA Population Division and Socialist People's Libyan Arab Jamahiriya, Population Growth Fertility and Mortality Census Monograph No. 2, ECA/PD/WP/79/5, 1979.
- Direction de la Statistique, Enquete Sénégalaise sur la fecondité Rapport national d'analyse Vol. 1, juillet 1981.
- ECA Population Division, Marriage Patterns and Change in Zambia ECA/PD/WP/1982/8, April 1982.
- République du Sénégal, Recensement general de la population, 1976.
- POPLAP, The 1980-81 Somalia Fertility and Mortality Survey of Benadir, Bay and Lower Shebelle, Summary Series No. 4, Dec. 1981.

1/ P.O. Ohadike, Socio-economic, Cultural and behavioural factors in natural fertility variations, paper presented at Seminar on Natural Fertility, INED Paris, 21-24 March 1977.

These data suggest that although a majority of African women marry before twenty, the average number of years lived in a single state by women who eventually marry before 50 years of age was about 20 years except for muslim and nomadic populations. Thus as can be observed in Table 1, the lower ages computed for Libya, Senegal and for the nomadic population in Somalia are probably influenced by muslim culture which encourages very early marriage among girlss. The data for Kenya and Zambia where the mean computed for the 1969 census was only slightly over 18 years 1/.

This evidence suggests that the majority of African women marry before 20 years although the mean age at first marriage for girls has been increasing as a result of expansion of general education, increased enrolment of girls in primary, secondary and higher education as well as increased prospects for employment of women in the modern sector. It is worth noting that the mean ages presented in Table 1 are not very low when compared to mean ages for European women. The fertility survey in France (1977) showed that about a third of all women aged 25-29 years had married before 20 years of age and that 30.1 percent of all women had been married before 20 years of age. The average age at first marriage for Hungary computed for a similar survey was 21 years 2/.

An anlysis of time spent by evermarried women in a married state since first marriage is presented in Table 2. These data which measure the percentage of elapsed time since first marriage which has been spent in marital union show that the percentages fluctuate only marginally by current age and by age at first marriage in the three countries studied. The average percentage is over 95 for women 20-24 years old and just under that figure for women 45-49 years old. These high average percentages which do not vary widely with increasing age at first marriage suggest that relatively little time is spent outside married state and that the contribution of marital dissolution to fertility reduction was likely to be very limited in all three countries.

1/ Republic of Zambia, Inter-regional Variations in Fertility in Zambia, Population Monographs No. 2, Central Statistical Office, Lusaka, 1975, p.13.

2/ WFS, The Hungarian Fertility Survey 1977 and the Fertility Survey in France 1977: A Summary of Findings.

Table 2. Average percentage of time spent by evermarried women in married state since first marriage by age at first marriage and current age

Current age	Country	Age at first marriage					
		15	15-19	20-24	25-29	30+	Total
20	Kenya	94.1	93.9	0.0	-	-	93.9
	Lesotho	97.0	96.6	-	-	-	96.6
	Senegal	97.0	96.7	-	-	-	96.9
20-24	Kenya	95.2	96.2	92.7	-	-	93.4
	Lesotho	95.2	97.2	96.8	-	-	96.9
	Senegal	95.2	94.4	94.2	-	-	94.7
25-29	Kenya	92.7	96.3	96.1	95.2	-	95.6
	Lesotho	91.8	95.2	96.4	(100.0)	-	95.3
	Senegal	97.0	94.5	93.9	(100:0)	-	95.5
30-34	Kenya	93.2	95.4	96.3	97.5	-	95.2
	Lesotho	87.3	92.8	92.3	92.2	-	92.1
	Senegal	95.9	94.8	84.9	(98.1)	(100.00)	94.7
35-39	Kenya	94.3	95.9	95.4	98.0	95.9	95.5
	Lesotho	86.0	92.6	92.1	97.2	92.0	92.3
	Senegal	94.7	92.6	94.4	(87.1)	(93.5)	(93.4)
40-44	Kenya	96.3	93.3	94.7	98.1	82.7	94.2
	Lesotho	91.0	90.6	85.9	87.2	88.7	89.3
	Senegal	95.2	95.0	88.5	86.3	(100.0)	94.4
45-49	Kenya	90.7	92.6	95.6	94.7	95.1	93.2
	Lesotho	82.8	89.1	90.7	73.2	54.9	83.1
	Senegal	94.3	94.5	95.0	(82.7)	(100.0)	94.4
Total	Kenya	93.8	95.2	93.2	96.7	92.0	95.0
	Lesotho	90.9	94.2	92.9	92.0	82.3	93.5
	Senegal	95.4	94.3	91.4	88.2	(98.4)	94.5

Cell frequencies for percentages in brackets are less than 10 cases.

Sources: ECA Population Division, Marital Composition and Fertility: Kenya and Lesotho, ECA/PD/WP/1981/7.
Direction de la Statistiques et WFS;
Enquête sénégalaise sur la Fécondité 1978, Vol. 11, juillet 1981, p.34.

A peculiar feature of marriage in African societies is the very close identification of the marriage act with parenthood. This identification of marriage with reproduction is so common among African socieities that brides are expected to get pregnant soon after the marriage ceremony. In order to examine how soon after first marriage women bear their first children, WFS data from Kenya, Lesotho and Senegal are presented in Table 3 showing the interval from marriage to first birth by women's age at first marriage. These data are presented only for women who first married 5-9 years before the survey. The data show that premarital births - indicated by the percentage of negative intervals - was much higher in Kenya than in Lesotho and Senegal. They suggest that about 23 percent of Kenyan women reported a premarital birth as compared to 6 and 5 percent of Lesotho and Senegalese women respectively. The data also suggest a positive correlation between age at first marriage and the probability of having a premarital birth among Kenyan women and among women aged 25 years and over in Lesotho and Senegal.

The high incidence of premarital fertility in Kenya is associated with modernization factors which contribute to the breakdown of the traditional courtship and marriage system. These factors include urbanization, increased employment opportunities in the city for young women, increased education for women and the very limited use of contraceptives among women.

It is also evident from the data in Table 3 that a higher percentage of women married for the first time below 15 years of age reported a longer interval between marriage and first birth. These data show that in general mean intervals between first marriage and first birth decrease with increasing age at first marriage.

The very long mean intervals for women married below 17 years are probably influenced by adolescent sterility among these young brides. Significant differences emerged among the three countries. While the mean interval from marriage to first birth for Kenyan women married before 15 years of age was 42.6 months, the intervals for Lesotho and Senegalese women of the same group were much shorter - 24.6 and 25.4 months respectively. It is evident that a longer time elapsed between first marriage and first birth among Kenyan women than among Lesotho and Senegalese women.

Table 3. Percent distribution of women who first married 5-9 years age ago according to interval between first marriage and first birth, by age at first marriage

Age at first marriage	Interval from marriage to first birth									
	*Negative interval	0-7 months	8-11 months	1 - Years	2 years	3 years	4 years	% No. Children	Mean length (mos.)	Total
Kenya										
/15	8.9	9.4	13.6	22.1	17.3	11.7	8.4	8.5	42.6	168
15-17	12.2	20.5	18.3	25.2	13.1	2.9	2.4	5.5	39.8	445
18-19	25.7	21.2	16.5	21.7	7.9	1.7	0.8	4.5	22.6	303
20-21	39.1	22.0	11.7	15.3	6.2	0.0	1.2	4.5	30.7	175
22-24	44.3	17.6	7.4	22.4	3.5	2.6	0.0	2.1	27.6	81
25-29	46.4	18.2	10.5	5.7	3.7	10.9	1.1	3.4	58.5	46
30+	58.5	0:0	0.0	3.0	38.5	0.0	0.0	0.0	-	10
Total	22.7	18.9	15.1	21.4	10.6	3.6	2.4	5.2	34.9	1227
Lesotho										
/15	6.7	2.2	11.1	35.6	11.1	20.0	6.7	6.7	24.6	45
15-17	2.9	5.5	18.2	25.8	21.1	10.2	6.2	10.2	22.8	275
18-19	3.3	4.1	25.9	28.4	14.8	9.5	3.7	10.3	20.5	243
20-21	11.0	7.3	23.9	19.3	18.3	5.5	4.6	10.1	19.6	109
22-24	9.1	9.1	23.6	30.9	12.7	3.6	1.8	9.1	16.4	55
25-29	21.7	4.3	26.1	34.8	-	4.3	4.3	4.3	16.5	23
30+	18.2	-	27.3	18.2	9.1	9.1	-	18.2	18.0	11
Total	5.7	5.3	21.8	26.8	9.2	9.2	4.7	9.9	21.1	761
Senegal										
/15	0.0	2.0	7.6	34.5	21.3	10.7	11.2	12.7	25.4	197
15-17	3.7	3.7	6.6	47.7	19.8	5.8	1.6	11.1	20.4	243
18-19	6.6	5.3	15.8	40.8	17.1	3.9	2.6	7.9	18.5	76
20-21	22.0	9.8	12.2	24.4	19.5	2.4	2.4	7.3	19.0	41
22-24	15.8	10.5	5.3	31.6	15.8	5.3	-	15.8	19.1	19
25-29	33.3	-	11.1	55.6	-	0.0	-	0.0	13.3	9
30+	-	-	-	-	-	-	-	100.0	-	1
Total	4.9	3.9	8.5	40.3	19.5	6.8	4.9	11.1	21.7	586

*Relate to premarital births only.

Sources: Kenya Fertility Survey 1977-78 First Report Vol.2 Central Bureau of Statistics Nairobi 1980 Vol. 2 Page A165 Lesotho Fertility Survey 1977 First Report Vol. 2 Central Bureau of Statistics, Maseru, 1981, page 92. Enquête sénégalaise sur la fécondité, Résultats définitifs, Volume II, Direction de la Statistique, 1982, p.82.

An analysis of the influence of age at first marriage on parity is presented in Table 4. These data which show the mean number of children ever-born to all ever-married women by age at first marriage suggest that mean parity decreases with increasing age at first marriage. Women who marry at later ages have a shorter period of exposure to the risk of childbearing. It is also evident that fertility is much higher in Kenya than in Lesotho and Senegal. Thus mean parities for Kenyan women are higher than those for the other two countries irrespective of age at first marriage. These means probably do not reflect the actual situation since the data do not take account of differences in the current age of these women. They do not also separate those "currently married" and those "ever married".

The data presented in Table 5 attempt to resolve these two problems by analysing the mean number of children ever-born to currently married and ever-married women aged 40-44 years by age at first marriage. Although the inter-country differences persist, difference in mean parity between currently married and ever-married women in each country are rather minor and this is obviously due to the very high percentages of marital stability and the universality of marriage among women in these countries.

The more striking differences in mean parity observed in Table 5 relate to age at first marriage. Thus 40-44 years old women married below 18 years of age reported much higher parities than their counterparts married above the age of twenty. This difference was observed for both currently married and ever-married women and suggest that a major determinant of total fertility in African societies is age at first marriage. This is probably the most important determinant of fertility in these countries where the practice of contraception and induced abortion is negligible and where marriage is almost universal. Thus as age at first marriage increases the reproductive period by consequence is reduced and this in turn reduces fertility.

However, it is worth noting that a rise in age at first marriage significantly affects maternal health and fertility since the very high health risk associated with teenage mothers, (e.g. low birth weights, miscarriages, still births and other obstetric complications), are likely to diminish with increased age at first marriage. Women who were married below 15 tend to be less educated than those who marry later. They are more likely to adhere to traditional practices related to prolonged breastfeeding for postpartum abstinence.

Table 4. Mean number of children ever-born to all ever-married women by age at first marriage, Kenya, Lesotho and Senegal

Age at first marriage	Mean Parity		
	Kenya	Lesotho	Senegal
< 15	5.6	3.9	4.3
15-17	4.8	3.2	4.2
18-19	4.6	3.1	3.7
20-21	4.5	3.2	3.2
22-24	4.3	3.1	2.4
25-29	4.6	2.9	2.8
30	4.2	2.4	3.6

Table 5. Mean number of children ever-born to currently and ever-married women aged 40-44 by age at first marriage

	Age at first marriage							
	< 15	15-17	18-19	20-21	22-24	25-29	30+	Total
Kenya								
Currently married women	8.6	8.2	7.5	7.0	7.1	7.0	3.8	7.8
Ever-married women	8.5	8.0	7.2	6.8	7.1	6.8	4.0	7.6
Lesotho								
Currently married women	5.6	5.2	5.6	5.1	4.5	3.8	3.0	5.1
Ever-married women	5.1	5.4	5.8	5.7	4.3	4.3	2.9	5.3
Senegal								
Currently married women	7.3	7.4	6.8	4.6	3.8	5.0	5.5	6.9
Ever-married women	7.3	7.2	6.7	4.6	3.7	4.5	5.5	6.8

Compliance with these practices would reduce the ultimate fertility of such women by lengthening the interval between births. On the contrary, women who marry later are likely to be more educated and adhere less to traditional practices which lengthen the intervals between births. They are however more likely to use contraceptives to regulate their reproductive behaviour. It would therefore be necessary to examine variations in fertility at different ages by age at first marriage.

This exercise is undertaken in Table 6 where the data in Table 5 are broken down by current age for women aged 20-24 and 40-44 years. These data are summarized in diagram in Figure 1. They show that fertility is highest among Kenyan women in all categories for all ages at first marriage. Although, mean parities are lower for higher than for Lesotho or Senegalese women. There is greater variation in mean parities for women aged 40-44 years than for women 20-24 years old in the three countries studied, although as noted earlier higher means are recorded for Kenyan women. This observation is also confirmed by mean parities computed for all women irrespective of age at first marriage.

Similar data obtained in Lusaka and Keembe, Zambia identify age at first marriage as a major determinant of the high fertility in those socieites. The data from a recent survey in these areas indicated that Zambian women married after 21 years of age had significantly lower parities than those married below twenty. The mean parities for Lusaka and Keembe women aged 40-44 who were married before 15 years of age were found to be significantly lower than mean parities recorded for women who married after 20 years of age[1/].

1/ UNECA, Fertility Levels, Patter . and Differentials in Zambia, Lusaka and Keembe; ECA/PD/WP/1982/13.

Table 6. Mean number of children ever-born to currently married women and ever-married women aged 20-24 and 40-44 years by age at first marriage

Current age (years)	Age at first marriage							
	15	15-17	18-19	20-21	22-24	25-29	30+	Total
Kenya: Currently married								
20-24	3.0	2.4	1.9	1.5	1.2	-	-	2.2
40-44	8.6	8.2	7.5	7.0	7.1	7.0	3.8	7.8
Lesotho: Currently married								
20-24	2.7	1.8	1.1	0.9	0.5	-	-	1.4
40-44	5.1	5.4	5.8	5.7	4.3	4.3	2.9	5.2
Senegal: Currently married								
20-24	2.6	1.9	1.4	1.0	1.0	-	-	2.0
40-44	7.3	7.4	6.8	4.6	3.8	5.0	5.5	6.9
Kenya: Ever-married								
20-24	2.9	2.4	1.9	1.5	1.2	-	-	2.2
40-44	8.5	8.0	7.2	6.8	7.1	6.8	4.0	7.6
Lesotho: Ever-married								
20-24	2.7	1.8	1.1	0.9	0.5	-	-	1.4
40-44	5.6	5.2	5.6	5.1	4.5	3.8	3.0	5.1
Senegal: Ever-married								
20-24	2.6	1.9	1.4	1.0	1.0	-	-	1.9
40-44	7.3	7.2	6.7	4.6	3.7	4.5	5.5	6.8

Duration of marriage as a determinant of fertility

Although it has been stated and demonstrated empirically that age at first marriage is a major determinant of fertility, it is worth noting that the extent to which age at first marriage affects ultimmate fertility is in turn determined by the duration of exposure to the risk of childbearing after marriage. This duration may be affected by the periodic absence of husbands during long periods, cultural practices related to the duration and intensity of breast-feeding and sexual abstinence and more importantly on the time women spend outside the married state after first marriage.

An analyis of the relationship between marital duration and fertility presented in Table 7 indicates that the mean parities of women in Kenya and Lesotho increase with longer duration of marriage. This pattern is common to urban and rural women although the figure for urban women with over 3o years marital duration is lower than that for rural women in both countries. Increased parity by duration of marriage is is to be expected since both marriage duration and parity are related to age. These data show that although mean parities in both countries increase steadily with longer duration of marriage, the Kenyan data suggest significantly higher fertility in that country than in Lesotho. In general, the data suggest higher rural than urban fertility in Kenya and Lesotho for all durations of marriage analysed.

Table 7. Distribution of mean number of children ever born by marital duration: Kenya and Lesotho

Marital duration in years	KENYA			LESOTHO		
	Urban	Rural	Total	Urban	Rural	Total
5	1.4	1.6	1.6	1.3	1.0	1.0
5-9	3.2	3.5	3.5	2.4	2.5	2.5
10-14	5.0	5.1	5.1	3.5	3.8	3.8
15-19	5.9	6.6	6.6	5.0	4.9	4.9
20-24	7.2	7.7	7.7	5.2	5.5	5.5
25-29	8.6	8.4	8.4	4.9	5.6	5.5
30	6.8	8.8	8.6	4.9	6.1	6.0
Total	3.6	5.0	4.9	3.0	3.2	3.2

In the context of African societal organizations where the functional boundedness of the conjugal family in different areas of behaviour vary widely within and between cultures, such simplistic analysis do not take cognisance of the fact that family compositions may be different from family organization. Recognizing that a woman's reproductive behaviour varies not only with her role in society but also with different phases in her domestic cycle, an effort is made in Table 8 to assess women's fertility in the first, second, third and fourth five year clusters of marital union.

Table 8. Mean number of children born in the first, second, third and fourth five years of marital union by age at first union for women married once only: Kenya, Lesotho

Years in union		Age at first marriage							
First five years of marriage (in union for at least 5 years)	Kenya	1.6	1.9	2.0	2:0	2.0	2.0	1.2	1.9
	Lesotho	1.3	1.5	1.5	1.7	1.7	2.0	2.2	1.5
Second five years of marriage (in union for at least 10 years)	Kenya	1.8	1.9	1.9	1.8	1.8	2.1	1.3	1.9
	Lesotho	1.3	1.4	1.4	1.5	1.5	1.1	1.0	1.4
Third five years of marriage (in union for at least 15 years)	Kenya	1.7	1.8	1.8	1.8	1.8	1.6	0.3	1.8
	Lesotho	1.1	1.3	1.3	1.2	1.3	0.8	-	1.2
Fourth five years of marriage (in union for at least 20 years)	Kenya	1.6	1.7	1.6	1.3	1.5	1.5	.	1.6$
	Lesotho	1.0	1.1	1.0	0.8	0.5	1.0	-	1.0

These data show that the intensity of childbearing in the first five years of marriage is sustained in the second five years and drops only slightly during the third five year cluster since marriage. This observation is common in Kenyan and Lesotho women although the former have higher fertility rates than the latter. A higher age at first marriage for women who married before 30 tended to increase the intensity of childbearing in both countries. These differences are certainly due to the educational, socio-economic and other value-systems adhered to by women married below 20 and those married after 22. The intensity of childbearing during the first, second, third and fourth five year clusters since marriage for women who married below 20 remained stable suggesting that these women do not reduce the momentum of childbearing during the first 20 years following their marriage. This suggestion is supported by data presented in Table 9 on the mean number of children everborn to currently married women by years since first marriage and age at first marriage.

In general, data in Table 9 show that a younger age at first marriage invariably leads to higher fertility. This pattern is common to all three countries notwithstanding the generally higher fertility among Kenyan than Lesotho or Senegalese women. The intensity of childbearing in the first ten years of marriage is positively related to the age at first marriage for Kenya, Lesotho and Senegal. The peak of mean parity by duration of marriage is attained after a shorter duration among women married after 22 years of age. This appears not to be the case for women married before 20 whose mean parities attain a much higher peak after a longer duration of marriage.

These data therefore suggest differing patterns of childbearing among women married early and those married later in life. Thus, women married early in life have a less intensive but a longer period of procreation in contrast to women married in their twenties who tend to have a more intensive procreative experience which does not naturally span the same length of marital reproductive time as is the case with women married at younger ages. It would be observed that for women of the same marital duration, those of them who married below the age of 15 years reported lower parities than their counterparts who married much later. This analysis reveals that although the number of children everborn varied with age at first marriage, differences in marital duration accounted for much of the differences in mean parity observed among women in the three countries.

Polygamy and Fertility

The relationship between polygamy and fertility has attracted the attention of many scholars of African demography. Although data on the subject has been rather fragmented, many have asserted that polygamy exercises a depressing role on fertility. Thus both medical and demographic writings have identified this type of marriage as a major cause of sub-fertility or infertility in Africa 1/. The assumption has been made in such studies that the higher the prevalence of polygamy, the lower will be level of fertility because of lower average frequency of coitus of women in polygamous marriages.

World Fertility Survey data from African countries enable us to re-examine

Table 9 Mean number of children ever-born to currently married women by years since first marriage and age at first marriage.

Years since first marriage		Age at first marriage							
		15	15-17	18-19	20-21	22-24	25-29	30+	Total
Under 5 years	Kenya	1.1	1.2	1.3	1.6	1.6	2.0	3.9	1.4
	Lesotho	0.7	0.7	0.7	1.0	0.8	1.6	1.6	0.8
	Senegal	0.7	0.8	1.1	1.1	1.4	1.4	3.8	0.9
5-9 years	Kenya	2.6	3.2	3.5	3.6	4.0	4.1	3.2	3.3
	Lesotho	2.2	2.3	2.3	2.3	2.7	3.0	2.4	2.3
	Senegal	2.3	2.4	2.8	2.7	3.1	3.6	-	2.5
10-14 years	Kenya	4.4	4.9	5.1	5.7	4.6	6.0	5.6	4.9
	Lesotho	3.3	3.7	3.62	3.7	3.9	3.9	3.2	3.7
	Senegal	3.9	4.3	4.0	3.5	2.0	4.4	7.0	4.0
15-19 years	Kenya	5.9	6.6	6.7	6.7	6.7	6.5	3.1	6.4
	Lesotho	4.5	5.0	4.6	4.9	4.7	4.6	-	4.8
	Senegal	5.5	5.8	5.5	5.9	3.3	4.5	3.0	5.6
20-24 years	Kenya	7.4	7.8	7.3	7.2	8.1	7.6	-	7.6
	Lesotho	5.4	5.5	5.3	5.8	4.2	-	-	5.4
	Senegal	6.7	6.2	6.8	4.6	8.3	8.0	-	6.3
25-29 years	Kenya	8.3	8.3	8.5	7.8	7.3	-	-	8.2
	Lesotho	5.2	5.7	5.8	5.4	3.7	-	-	5.6
	Senegal	7.2	7.4	7.5	5.8	4.8	-	-	7.2
30 and over	Kenya	8.0	8.5	8.4	7.8	-	-	-	8.3
	Lesotho	5.7	6.0	6.4	-	-	-	-	5.9
	Senegal	7.2	7.6	6.7	-	-	-	-	7.4
Total	Kenya	5.6	4.8	4.7	4.6	4.4	4.6	4.1	4.9
	Lesotho	3.6	3.1	3.0	3.1	2.9	3.0	2.2	3.1
	Senegal	4.3	4.2	3.7	3.3	2.4	3.0	3.6	4.1

Table 10: Percentage of currently married women in a polygamous union

Current age	Kenya	Lesotho	Senegal
15-19	23.9	4.1	30.6
20-24	21.7	6.8	35.5
25-29	27.7	10.0	46.5
30-34	28.4	7.3	57.7
35-39	33.2	11.9	56.5
40-44	38.3	9.9	65.5
45-49	42.3	10.9	64.8
Total	29.5	8.5	48.5
Mean parity for women 40-44 years old	7.6	5.6	6.8
Percentage of women 10 or more years younger than their husbands	22.0	10.7	N.A.

These data indicate that nearly half of all married women in Senegal were in polygamous marriages. The prevalence is also very high in Kenya (29.5 percent). The high prevalence of polygamous unions in Kenya and Senegal contrasts significantly with a much lower rate of 8.5 percent for Lesotho. It would be observed that the Kenyan and Senegalese data show both high percentages polygamous marriages and higher mean parities than the Lesotho data.

The high prevalence of polygamy in Kenya and Senegal are sustained by a pattern of inter-generational marriage where males get wive from several generations below theirs. This practice is sustained because the young ages structure in these countries results in very many girls aged 15-25 looking up to a smaller cohert of males 10 years or more older than them for marriage ata time when their male counterparts are not ready for marriage.[1/] Thus, as can be seen at the bottom of Table 10, a higher percentage of polygamous marriages is associated with wider

1/ Kenya Fertility Survey 1977-78, Vol. 1, op. cit. p. 81
Enquete Senegalese sur la fécondité 1978, Vol. 1. op. cit. p. 81.

2/ Very large age differences between husband and wife have also been observed in Ethiopia where the relatively old grooms marry brides whomay be half their ages; - a factor which contributes to rather high percentage of broken marriages even in rural areas see P.O. Ohadike, op. cit. p. 10.

age differences between husband and wife. A breakdown of the data for Kenya and Senegal show that polygamy is as prevalent in urban as in rural areas, and is common among all ethnic groups in the two countries[2/].

In view of its low prevalence in Lesotho, polygamy exerts no significant influence on fertility in that country. It suffice to note here that notwithstanding the relatively high rate of polygamy in Kenya, all indices of fertility point to a very high level of fertility in that country. An analysis of data on mean number of children ever born by number of wives of husbands is presented in table 11 for Senegal.

Table 11: Mean number of children everborn by number of wives of husband and by women's age at first marriage, and current age; Senegal

	Age at first marriage							
	15	15-17	18-19	20-21	22-24	25-29	30	Total
All ages								
One wife	3.8	3.7	3.0	3.0	2.5	2.7	(4.3)	4.0
Two wives	4.7	4.7	4.5	3.6	2.7	3.6	(3.5)	4.6
Three or more wives	5.1	5.1	4.3	3.8	1.9	(1.5)	(2.5)	4.1
Total	4.3	4.2	3.7	3.3	2.4	3.0	(3.6)	4.1
Current age: 25 years								
One wife	1.5	1.2	1.2	1.1	1.0	-	-	1.[illegible]
Two wives	1.9	1.4	1.3	(1.0)	(1.0)	-	-	1.6
Three or more wives	1.8	1.6	1.2	(1.0)	(1.0)	-	-	1.6
Total	1.6	1.3	1.2	1.0	1.0	-	-	1.4
Current age: 35-44								
One wife	7.0	6.6	6.4	5.1	(3.6)	(4.3)	(1.5)	6.5
Two wives	7.2	6.4	5.8	5.1	(4.0)	(4.9)Q	(3.5)	6.4
Three or more wives	6.9	6.6	6.2	5.2	(1.4)	(3.0)	(4.0)	6.4
Total	7.1	6.5	6.1	5.1	3.1	4.4	(2.8)	6.4

* Figures in brackets indicate that numbers contained in the cell were less than 10.

These data indicate no clear differences in mean parity by number of co-wives for Senegalese women. When all women were classified by age at first marriage, mean parities for those who were in polygamous marriages of three or more wives were higher than those of women in monogamous unions. Mean parities among women currently below 25 years of age were slightly lower for women who were the "only wife" of their husband. Among women aged 35-44 years, mean parities for "only wives" were not significantly different from those of women in unions with two or more co-wives. These data suggest no negative relationship between fertility and polygamy in Senegal although nearly half of all married Senegalese women were in polygamous unions.

The assumption that fertility of polygamous unions is depresssed by lower average frequency of coitus of women in such unions is not supported by the data from the three countries under review. It would appear that past discussions on this subject have attempted to explain cause by effect since it is a well known fact that the sterility or subfertility of a first wife is usually a major reason for a husband taking a second wife in socieites which place high premium on childbearing.

Conclusion

It has been demonstrated in this study that marriage is universal practice in African societies and that it is usually contracted at relatively early ages by a majority of women. The mean duration of the period spent by women in the single state (singulate mean age) was about 20 years for women who eventually married before the age of 50 years. The evidence presented in this paper suggests that although a majority of African women marry before 20 years of age, there is convincing evidence from several countries in this region of increasing age at first marriage. The data also indicate that women spend most of their reproductive life in a marital state.

An analysis of data on the timing of first births in the countries studied supports the view that the marriage act is closely identified with parenthood and that the closeness of the two indicates that marriage is contracted for procreative reasons. The significant percentage of women who bear children before marriage - especially in Kenya - suggests that procreation is considered a very important role for all women in these societies. It is evident from this analysis that while data on mean parity often shows a negative relationship between parity and age at first marriage, the strength of this relationship can only be established if the data are controlled for current age and duration of marriage.

Although it has been illustrated that mean parities increase with duration of marriage for urban and rural women, the mean parrities for the latter category are higher than for the former. The influence of rural and urban residence on fertility cannot be adequately evaluated by a simplistic classification of women by rural or urban residence. A more suitable classification would require grouping women by number of years lived in rural or urban areas. This will eliminate the problem of classifying recent rural-to-urban migrants under urban and vice versa.

This analysis also indicates that the intensity of childbearing in the first decade of a woman's married life is positively related to age at first marriage. Thus, women who marry early experience a less intensive reproduction life but bear children over a longer period. In contrast, those who marry at later ages experience a more intensive reproduction life which is however shorter than that for women who married earlier.

In the light of this observation, the total fertility effect of marital duration standardized for education and ethnicity undertaken for Kenya and Lesotho[1/] demonstrated that the total effect of education on mean parity was slight and that although mean parity declines with higher education, marital duration rather than education accounted for observed variations by education

It can be concluded therefore that the relationship between marriage and fertility in Africa is currently not clearly understood. Childbearing and employment among married women may be compatible if unemployment in the society is high and if relatives are available to care for pre-school children. Thus, although it has been argued that high wages and more education for women would reduce fertility, the age at first marriage for those women must increase as a result of increased education available for them. Furthermore, employment opportunities must rise appreciably to make the hiring of mother surrogates a difficult or expensive task for most women. Since fertility behaviour can be seen as a conscious response reflecting the value women and their kinship place on children, a thorough analysis of the relationship between marriage and fertility would require more objective and less stereotype studies of the structure, composition and organization of the household/family-type women move into when they marry.

1/ UNECA Effects of Marital duration ethnicity and education on mean parity: Kenya and Lesotho. ECA/PD/WP/1981/9.

Finally, the analyses undertaken in this paper do not establish any clear relationship between polygamy and fertility. Although about one third of Kenyan women and close to half of all Senegalese women were in polygamous marriages, analyses of mean parities by number of wives, by current ages and age at first marriage do not suggest that polygamy depresses the level of fertility as has been suggested in several studies. It is in fact doubtful whether the assumed effect of reduced average coital frequency could be significant enough to affect ultimate fertility. It is however obvious that the prevalence of polygamy is likely to be raised by the failure of first wives to bear children. In this regard, polygamy would seem to be the result of infertility in such cases and not its cause.