

ATTITUDES AND PRACTICE OF CONTRACEPTION IN KENYA*

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With a crude birth rate estimated to be approximately 50, a crude death rate of approximately 20, and a rate of increase of about 3 percent per year, Kenya shares demographic characteristics common in much of the underdeveloped world today.¹ However, Kenya is unique in sub-Saharan Africa in that it is, up to the present, the only country in this region to recognize the importance of rapid population growth and to begin to take steps to deal the problem. Early in 1968, the Ministry of Health began to provide free family planning services as part of its outpatient medical services. The government has also recently made substantial funds available to the Family Planning Association of Kenya (an IPPF-affiliate) to further the work of the voluntary association.

As the first country in the region to consider actively a program in fertility control, a KAP study appeared useful. No such study had previously been carried out in a rural population in Eastern Africa.²

The report which follows is the first of those dealing with the results of the survey. It will be restricted to the responses of those women who reported themselves to be married or ever-married and in the child-bearing years (15-49).

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¹ *Kenya Population Census, 1962, Vol. III*. (Statistics Division, Ministry of Economic Planning and Development, October, 1966).

² A very similar survey was carried out in a lower middle income residential estate, Shauri Moyo, in Nairobi in 1966 by Thomas Dow, Jr., "Attitudes Toward Family Size and Family Planning in Nairobi," *Demography* IV, 2 (1967) 780-797.

Attention was limited to the largest tribes; no attempt was made to include nomadic groups. To have included the latter would have seriously increased the costs and difficulties of field work and the complexity of analysis without a corresponding gain in significance. Areas where six of the seven largest tribes of Kenya predominate were selected for inclusion in the sample. The tribes were: Kikuyu, Luo, Luyia, Kamba, Gusii, and Mijikenda—chiefly Digo—were chosen rather than the slightly more numerous Meru in order to obtain a wider geographic spread with the inclusion of a Coastal group. A serious weakness in the selection by tribal group is that it was not possible to include any of the "Nilo-Hamitic" tribes. However, the tribes represented in the sample comprise about 70 percent of Kenya's total African population.

Unfortunately, it was not possible to use random sampling methods within the regions selected. Two considerations were chiefly responsible. First, no reasonably up-to-date District-wide sample frames were readily available when the field work was begun in 1966. Second, it appeared likely that non-sampling errors would be greater than those due to sample selection procedures. One of the most important steps taken to minimize non-sampling bias was to employ, in almost all areas, enumerators who lived in and were well-known to the residents of the sample areas where they worked. The necessity of being able to obtain the services of local resident enumerators (especially female enumerators) in the selected areas meant that the possibility of even area sampling was quite restricted.

Because of the sampling procedures used, the statistics presented below cannot be thought of as representative estimates of the corresponding national pa-

rameters. However, their internal relationships should provide useful information about attitudes and behavior relevant to fertility limitation in rural Kenya.

The goal in selecting locally resident enumerators was to take advantage of the existing social structure in the sample areas. At the outset, there appeared to be two potentially important sources of non-sampling bias which would have to be balanced off. On the one hand, there was the risk of suspicion and reserve on the part of the community when confronted with a stranger asking complicated and somewhat intimate questions. It was feared that this problem might particularly arise if rather more sophisticated enumerators such as university students were employed. On the other hand, there was the risk of loss of reassurance of anonymity in the use of local people as enumerators.

It was decided to accept the latter risk in order to attempt to minimize the former. Enumerators were selected who not only lived in the areas in which they worked but also had a known status in the community and in the kinship structure.

Experience in the field suggests that this procedure gave satisfactory results. Some of the enumerators reported greater resistance from respondents when they attempted interviews at any greater distance from their own area or group. In two areas in particular, noticeably greater difficulty was encountered by enumerators in dealing with respondents who were not members of their own clan.

The specific procedure employed first in the beginning field work in a given region was to find where reliable enumerators might be available. Once the enumerators were located, a brief survey of the vicinity was made, and a specific small area was designated as the sample cluster. The enumerators were instructed to interview all adults living in the cluster. Male enumerators interviewed all male respondents and female enumerators interviewed all the females. Criteria used in selecting the cluster were, first, that it not

be distinguishably atypical of the general area; second, that it contain a population of approximately 150 adult males; third, that it have clearly defined boundaries. Cluster boundaries usually consisted of obvious landmarks such as roads, streams, ridges, and so forth.

The schedule of questions was originally drawn up in English. Many of the questions were designed to closely resemble those used in comparable studies in other parts of the world. However, the schedule as a whole was constructed in such a way to be as relevant as possible to the local situation.

For field use, the questionnaire was translated into the vernacular of the areas in the sample. Thus, there are six translations plus the original English. Although the translations were made with the greatest possible care, some errors did undoubtedly creep in. Not all concepts are equally easy to express in all seven of the languages used. However, all enumerators were bi- or tri-lingual and had the English and Swahili versions available to them at all times.

Before interviewing in an area was begun, and again during subsequent supervisory trips, visits were paid to local leaders to explain the nature and purpose of the survey. District Officers, Chiefs, Sub-Chiefs, elders, local religious leaders, local politicians, and many others were approached. Receptiveness and help from this group were given with remarkable (and sometimes even embarrassing) generosity.

The refusal rate was so low that individual cases can almost be itemized. The chief reason for refusal was sterility or serious subfecundity. People who had great difficulty in having children found the questions painful to respond to and sometimes terminated the interview. Moreover, the enumerators, who knew at least some of their respondents, found it difficult to interview people who were commonly known to be sterile. Among others who refused, there was a professional burglar, a somewhat disreputa-

ble witchdoctor, and a few women with children but no husband. (However, not all women in the last class refused to be interviewed.) In general, the refusal rate was so low as to be virtually negligible.

CHARACTERISTICS OF THE SAMPLE

The sample included 744 married or ever-married women in the childbearing years. In this report, their responses will be treated as a single population. Separate analysis by individual tribal group will not be attempted at this stage since, interesting as the results might be, it would increase complexity very considerably.

Relevant social and economic characteristics of the sample women may be briefly noted. Some 48 percent described themselves as completely illiterate; another 20 percent claimed to be literate but only in their vernacular (including Swahili, the East African lingua-franca, at the Coast): 15 percent claimed literacy in their vernacular and Swahili; finally, 16 percent described themselves as literate in English along with either Swahili or a vernacular or both. Judging from the attained educational levels reported in the 1962 Census of Kenya, some of the sample women may have been a bit generous in their estimation of their abilities to read and write. However, literacy in the vernacular and Swahili does not necessarily

require formal schooling and, in addition, considerable progress in adult literacy as well as formal education has been made in recent years.

As regards housing, 61 percent of the sample women had a thatch roofed residence, 37 percent a metal roof (including flattened petrol tins, and so forth), and the remaining few reported that they had no house of their own at all. Some 63 percent reported that their house had two or fewer rooms.

In the sample areas themselves, densities of population ranged from less than 100 to over 1,500 persons per square mile. Altitudes varied from sea level to above 6,500 feet. In all areas, settled agriculture was the predominant economic activity, although the relative importance of market farming as opposed to subsistence differed markedly. As throughout Kenya, the system of land tenure was either consolidated private ownership or was traditional right of possession and use.

FINDINGS

Near the beginning of the interview—as an introduction to the subject of family size—the respondents were asked: “What is the best thing about having many children?” Responses are shown in Table 1.

It is not very surprising to find 38 percent of the responses referring to some aspect of the economic advantages of many children. What is remarkable is that another 38 percent denied the premise of the question, that there is, in fact, something valuable in having many children, and took the position that there is nothing good at all. It is frequently asserted that relatively uneducated African respondents will often, out of a deep sense of politeness or an attempt to be agreeable, answer a question in the way which they think most pleasing to the interviewer. However, in response to this question, which requests the respondent to find something good in having a large number

Table 1.—POSITIVE CHARACTERISTICS OF HAVING MANY CHILDREN ACCORDING TO EVER-MARRIED WOMEN, AGE 15-49, IN KENYA, 1966

Positive characteristic	Percent
Total.....	100.1
Nothing good at all.....	38.4
Old age security.....	13.2
Household and farm help.....	25.3
Counterbalance losses from death..	1.4
Social value of large numbers.....	3.9
Pleasure of being with children...	5.6
Fulfill God's commands.....	2.2
Other.....	4.6
Question meaningless.....	1.6
Not ascertainable.....	3.9

of children, just less than 40 percent rejected the cue altogether.

It is not necessary to look for the reason for this rejection. The next question in the interview was: "What is the worst thing about having many children?" Here, there was no difficulty for the great majority of respondents in accepting the premise of the question. Seventy-five percent answered that economic strain (school fees, food, clothing, and so forth) is introduced into the family when there are many children. In this case, only 11 percent rejected the premise of the question by responding that there is nothing bad about having a large family. Responses to this question are shown in Table 2.

The central theme of the responses to these two questions is that children may be economically useful, but that a big family is expensive and may not be an advantage at all. There is a strongly marked tendency to see children in an economic rather than a psychological or a social context. All other considerations relevant to family size—the psychological or social benefits of a large or small number of children, risks to the mother's health, fear of infant or child mortality—occur with nearly insignificant frequency.

To measure the quantitative aspects of attitude toward number of children, two questions were used. The first, a measure of ideal family size, was, "If you were just

starting your married life all over again, and could have just the number of children that you wanted, how many would be best?" The other question used was, "Do you want more children than you now have?" (If yes) "How many more would you like to have?"

Table 3 shows the distribution of ideal family sizes selected by the women of the sample.

The average ideal family size, 6.03 children is high. In comparison with similar studies carried out elsewhere in the world, the sample women of rural Kenya are still much more oriented toward a large family. Indeed this is one of the highest average values recorded in such a survey.³

It is noteworthy that comparably high average ideals have been found especially in studies carried out elsewhere in Africa south of the Sahara. The work of Caldwell

³Two extremely useful works summarizing the range of studies of knowledge, attitudes, and practices of fertility limitation are W.P. Mauldin, "Fertility Studies: Knowledge, Attitude, and Practice," in *Studies in Family Planning*, No. 7, (June, 1965); and, B. Berelson, "KAP Studies on Fertility," in *Family Planning and Population Programs*, the Proceedings of the International Conference on Family Planning Programs, Geneva, August, 1965 (Chicago: The University of Chicago Press, 1966).

Table 2.—NEGATIVE CHARACTERISTICS OF HAVING MANY CHILDREN ACCORDING TO EVER-MARRIED WOMEN, AGE 15-49, IN KENYA, 1966

Negative characteristic	Percent
Total.....	99.9
Nothing bad at all.....	11.1
Economic strain.....	75.1
Children from large families end up badly.....	5.4
Too many children cause (social, psychological) strain in the household.....	3.5
Other.....	.8
Question meaningless.....	1.4
Not ascertainable.....	2.4

Table 3.—IDEAL FAMILY SIZES FOR EVER-MARRIED WOMEN, AGE 15-49, IN KENYA, 1966

The best number of children	Number	Percent
Total.....	774	99.9
0.....	0	0.0
1-2.....	46	5.9
3.....	31	4.0
4.....	210	27.1
5.....	48	6.2
6.....	184	23.8
7-8.....	78	10.1
9-10.....	22	2.8
11 or more, or as many as possible ^(a)	99	12.8
Not ascertainable.....	56	7.2

(a) estimated as 12.
Arithmetic mean = 6.03
Standard deviation = 2.9

and Pool in Ghana—despite rather different field procedures—are among those that have produced ideal values as high as those found in Kenya.⁴

Thus, the ideal family size is almost the same as the average achieved family size for all Kenya women (6.8 children), as estimated in the 1962 Kenya Census. These data suggest, then, that the women of rural Kenya are having, on the average, only very slightly more children than they consider ideal. On the other hand, one may also not neglect the more than one-third (37 percent) who consider 4 or fewer children to be best. It is important to note that over half of these 37 percent are women less than 30 years of age. These women, if their fecundity is average and they do not limit their fertility, will have substantially more children than they say they want.

However, it is necessary to be a bit cautious in accepting these figures. The concept of an ideal family size if one were starting one's married life over again is by no means a simple one. It asks the respondent to make judgements about a situation which does not, and in fact cannot, in any real sense, exist. Thus, the responses reported in Table 3 might reflect little more than a kind of random guessing in response to an incomprehensible question.

That this is in fact probably not the case is suggested by the responses to the question might be expected to produce more reliable information concerning the respondent's attitudes toward family size. It asks for a specification of a more concrete existing want rather than a specification of the more vague and hypothetical concept of an "ideal". Nevertheless, examination of these data, shown in Table 4, finds a coherent pattern of re-

sponses which are quite consistent with attitudes toward ideal family size.

The distribution of values of desire for additional children show a most reassuring pattern of consistency. Averages decline monotonically as number of living children and age increase—and this is precisely what one would most reasonably expect them to do if the question has been meaningfully understood and if the respondents have at least some notion of what the normally expected size of family is going to be (whether or not this is an "ideal"). This conclusion is reinforced by the corresponding rise in proportion wanting no more children as age and number of living children increases.

In addition, the actual number of desired additional children fit as closely as might be expected with the ideal family sizes. By the time women have had six living children or have reached about age 39, over one-half of them want no more children. Similarly, if the average number of living children of all women in the sample, 3.75, is added to the average number of additional children wanted, 2.93, a number almost identical to the estimated average total fertility of Kenya African women is found. This value is also comfortably close to the average ideal number of children.

Here again, comparatively very high fertility aspirations are expressed. However, there is also a substantial percentage of 29.6 who want no more children at all. Moreover, as Table 4 indicates, by no means all of the women who want to stop having children are so old that they are near the end of their childbearing years. More than one-third of those 30–34 and a fifth of those 25–29 years of age feel they have already had enough children.

To conclude this brief look at attitudes relevant to numbers of children, it is quite apparent that there is but scant indication of a trend toward the values associated with the small family. Despite the very widespread awareness of economic strain that comes with a large number of children, the actual numbers

⁴D. I. Pool, "Ghana: A Survey on Fertility and Attitudes Toward Family Limitation," *Studies in Family Planning*, No. 25, (December, 1967). Caldwell's surveys are described in Birmingham, Neustadt and Omoboe, *A Study of Contemporary Ghana*, Vol. II. Ch. IV. (London, 1967).

aspired to remain large. It appears that an ideal family size much different from what is on the average achieved remains somewhat alien. There are grounds for thinking that number of children may well be seen as largely outside the area of human control. Children just come; a succession of pregnancies is simply a normal component of adult life.

At the same time, though, there is a substantial proportion of women, many of them relatively young, who appear to be beginning to moderate their desires for children. Just less than one-third of the sample women want no more children; just over one-third consider a family of four or less to be ideal. Moreover, more than 40 percent of those with five or more children and well over one-half of those

with six or more children do not want any more.

The question then arises of how and to what extent these attitudes are manifested in behavior.

To some extent, admittedly, there is little need for detailed examination to obtain the most broad and crude kind of information. With an estimated crude birth rate of 50, there is obviously little effective contraception (or any other kind of fertility control) being practiced. However, it is instructive to look beyond this crude level.

In order to determine knowledge of methods of fertility limitation, the respondents were asked, "Have you ever heard of anything that a man and his wife might do in order to avoid having children

Table 4.—DESIRE FOR ADDITIONAL CHILDREN BY NUMBER OF LIVING CHILDREN AND BY AGE^(a) OF EVER-MARRIED WOMEN, AGE 15-49, IN KENYA, 1966

Parental characteristics	Desire for additional children		
	Average number of additional children wanted	Percent who want no more children	Number of respondents
Number of living children:			
Total.....	2.93	29.6	715
0.....	5.80	3.1	65
1.....	5.05	1.2	86
2.....	4.32	3.4	88
3.....	3.29	17.0	106
4.....	2.65	28.3	106
5.....	2.16	42.9	34
6.....	1.60	56.5	85
7.....	.88	69.0	42
8.....	.42	70.8	24
9.....	0	100.0	17
10 or more.....	.17	91.7	12
Age:			
Total.....	2.93	29.6	715
14-19 years.....	5.45	0	51
20-24 years.....	4.18	6.5	153
25-29 years.....	3.16	20.4	157
30-34 years.....	2.56	36.0	100
35-39 years.....	2.39	44.5	119
40-44 years.....	1.02	65.2	66
45-49 years.....	1.08	69.2	52
Age not ascertainable.....	6.35	5.9	17

(a) n = 715 (59 women failed to report desired number of additional children).

that they do not want?" If the response is *yes*, the respondent is asked to "describe the methods." Responses are shown in Tables 5 and 6.

The most striking finding in Table 5 is that nearly one-half, 47.1 percent, of all women in the child bearing years report knowing of no method whatever. It might appear possible that this fairly high proportion reflects more shyness about

discussing the topic than it does lack of information. However, there is evidence to indicate that the respondents generally tried hard to answer the question positively. Some of them answered "yes" to the first part of the question but then were unable to describe any methods when the second part was asked. Others described methods that do not exist or were able to give only the most vague kind of informa-

Table 5.—KNOWLEDGE OF METHODS OF FERTILITY CONTROL
BY AGE OF EVER-MARRIED WOMEN, AGE 15-49,
IN KENYA, 1966

Age	Percent who know no method	Average number of methods known to those who know of some method
Total.....	47.1	1.79
14-19 years.....	69.8	1.25
20-24 years.....	42.8	1.72
25-29 years.....	43.2	1.93
30-34 years.....	47.8	1.88
35-39 years.....	44.1	1.75
40-44 years.....	40.6	1.66
45-49 years.....	52.7	2.08
N.A.	76.2	1.40

n = 966 (8 women gave responses which made it impossible to determine how many methods they knew.)

Table 6.—METHODS OF FERTILITY CONTROL KNOWN AND
AVERAGE AGE OF THOSE WHO KNOW EACH METHOD,
AMONG EVER-MARRIED WOMEN AGE 15-49,
IN KENYA, 1966

Contraceptive method	Number who know the method	Average age of those who know the method(a)
Female sterilization..	154	31.2
Oral pill.....	142	30.6
Abortion.....	86	33.4
IUCD.....	82	31.2
"Injection".....	60	30.0
Rhythm.....	53	32.9
Vague.....	52	32.2
Condom.....	31	32.5
Traditional.....	22	37.5
Other(b).....	31	...

(a) excluding those whose age was not ascertainable.

(b) "Other" comprise diaphragm, chemical spermicides, withdrawal, abstinence, and vasectomy.

tion. It appears to be a fair conclusion that knowledge of methods of fertility control is, in fact, very limited among rural Kenyan women. This, of course, accords well with the interpretation offered for attitudes toward family size reported by the sample women. Fertility limitation tends to be a rather alien idea simply because the means to achieve are not widely known.

The very high proportion of young women (i.e., aged 14-19) who report no knowledge of methods of fertility control suggests that this is the sort of information which most women acquire gradually only after marriage. This interpretation would explain the fact that while the highest proportion of those who know no method is found among the youngest age group, the lowest proportion is not reached until the women are 40-44.

The relatively high proportion among women 45-49 may well be explained by nothing more than sampling variability—there are only 52 respondents in this age group. Another possibility is that many of these women, being near the end of their childbearing years, are less concerned with matters of fertility, its control, or discussion of the topic. At the same time, others among these older women may be beginning to take on a traditional specialized role of instructress in sexual and family matters. This would explain the sharp increase in the percent who report knowing no methods at the same time that the average number of methods known to those who know of some method rises to its maximum value. Unfortunately, it is beyond the scope of this paper to explore these speculations more fully.

Variations in knowledge of methods of fertility control show a possible slight trend toward the spread of information, though. The second trough in the percent who know no methods, among women in their early 20's may indicate that apart from those most recently married, younger women are more accessible to information of methods of contraception. This

proposition is supported by the fact that a peak in the average number of methods known occurs among the relatively young 25-29 year old women. Additional relevant evidence is found in Table 6.

In the second column of Table 6, it can be seen that among the methods reported by women with the youngest average ages are the oral pill, the IUCD, and an "injection." The third of these methods is little more than an act of faith in the possibility of fertility limitation by modern medical means. There is no contraceptive injection available for general use yet in Kenya; the belief that such does exist is most probably a generalization of penicillin. However, the mention of this imaginary method along with the two most modern methods by the relatively younger group of respondents offer some support to the speculations of the preceding paragraph.

The most important piece of information in Table 6, though, is that several of the most widely known methods reported by the sample women are also the most extreme, dangerous, or least effective. Female sterilization commonly described by the respondents as "turning the womb upside down," for example, is both the most extreme and the best known. Abortion (usually self-induced by use of washing blue, and an overdose of malaria prophylactic or traditional herbs) is the third best known. Indeed, if female sterilization, induced abortion, "injection," rhythm, vague, and traditional (usually involving witch-doctoring or other magical activities) methods are combined, they comprise 60 percent of all methods reported known. Well over half the methods reported, thus, are likely to be either objectionable or ineffective. Quite obviously, there is little in the nature of such information that would encourage widespread favorable attitudes toward the notion of taking steps leading to the achievement of a smaller family.

It is also of interest to observe, in Table 6, that the traditional methods are known to a relatively small group who are

considerably older, on the average. There were, apparently, traditional practices employed to restrict or control fertility which now are thought to be dying out. From the information gathered in this survey, it seems that these practices were less a matter of family planning than a means of avoiding an unsanctioned pregnancy—for example, to unmarried girls or to women whose husbands were to be away on extended trips. From the brief descriptions obtained, it is likely that some of these practices would have little or no physiological effect.

Also noteworthy is the very infrequent reference to abstinence or withdrawal. As Poole reports for Ghana, abstinence appears not to be commonly thought of as a technique by means of which a family can be planned.⁵

Of the modern methods, the oral pill is by far the best known. However, from the nature of some of the descriptions, it is clear that many of the respondents had only the most hazy awareness of the pill. It is likely that some of the women who referred to the "pill" had in fact heard nothing of the oral contraceptive specifically but were merely generalizing from their awareness of the use of pills in modern medicine, similar to those who referred to an "injection." The overall impression regarding knowledge of methods of fer-

⁵ D. I. Pool, *op. cit.*

tility limitation is that the sample women are for the most part both uninformed and ill-informed.

Given this lack of reliable information concerning methods of fertility limitation, it should come as no surprise that very few women in the sample were actually contracepting at the time they were interviewed. Specifically, as Table 7 shows, only 6.3 percent were actively contracepting. The great majority, 85.5 percent, reported that they had never made a formal attempt to limit the likelihood of conception.

Those women who reported themselves as using a contraceptive method at the time of the interview were, as was to be expected, somewhat older than the others. In a society where contraception is infrequent and unfamiliar, its practice is likely to be adopted (if at all) only after a family has reached or surpassed the number of children felt to be appropriate or manageable. Its use for child spacing or for control of the timing of births is not likely to occur until the notion that fertility in general is something within the realm of individual decision is far more widespread.

CONCLUSION

The data indicate that in modern Kenya the economic strains arising from larger numbers of surviving children with-

Table 7.—CONTRACEPTIVE PRACTICE AND AVERAGE AGE OF EVER-MARRIED WOMEN, AGE 15-49, IN KENYA, 1966

Contraceptive practice	Number	Percent	Average Age ^(a)
Total.....	774	99.9	...
Never contracepted....	662	85.5	30.9
Previously contracepted.....	31	4.0	31.0
Now contracepting.....	49	6.3	33.5
Not ascertainable.....	32	4.1	29.0

(a) Excluding those whose age was not ascertainable.

in the family are clearly and acutely felt by the rural respondents. Nevertheless, transition to a smaller family system is impeded by lack of information or by misinformation about the means to achieve control over fertility by those who might wish to do so. In the absence of widespread knowledge of safe and reliable contraceptives, ideals of family size, on the average, tend to remain near the average levels of achieved fertility. While

there is a substantial minority of women who express a desire for a smaller number of children than they will, in all probability, have, their ideals tend not to be followed up by action to achieve their goal. Accurate knowledge of and access to the possibility of more safe and reliable techniques of contraception are clearly necessary, although possibly not sufficient, conditions for any alteration in family size in Kenya.