# CHANGING FERTILITY AND CONTRACEPTIVE BEHAVIOR OF KOREAN WOMEN: A PRELIMINARY FINDINGS FROM THE KOREAN NATIONAL FERTILITY SURVEY, 1974


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## I. THE SURVEY

The 1974 Korean National Fertility Survey was undertaken as part of the World Fertility Survey, an international programme of research into human fertility. The WFS aims to collect and analyze data on fertility which are internationally comparable, therefore permitting comparisons across countries and regions, and promote world understanding of its fertility and population situation. An important subsidiary aim, a by-product in effect, is the provision of a body of methodological and substantive literature on fertility studies, thus contributing to the cumulative, scientific knowledge about human fertility.

The survey was undertaken jointly by the Korean Institute for Family Planning and the Bureau of Statistics of the Economic Planning Board. The involvement of these particular agencies reflects the Government's interest in undertaking this survey for the purpose of obtaining data of relevant to economic planning and the national family planning program.

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The sample design aimed for a self-weighting, nationally representative, probability sample, using basically a two-stage design for the household survey with a further sampling stage for the individual survey. Census enumeration districts were used as the primary sampling units, with households in the selected PSU's consituting the ultimate sampling units. Sample size of 21,248 and 6,849 households for the households and the individual surveys was drawn, respectively. An over-all sampling fraction was approximately one over 340 for the household survey. Household schedules were completed in 20,932, or 95.6 per cent, of the total household sample. In fact, 5,724 eligible women were identified in the 5,271 households and 5,417 (94.6 per cent) of them successfully interviewed. The response rates for the household survey and the individual survey were relatively high. The fieldwork was carried out by about 130 interviewers and 20 supervisors, all females except male supervisors, over a period of 12 weeks beginning in September 1974.

## II. FINDINGS

### A. BACKGROUND CHARACTERISTICS OF THE POPULATION AND ELIGIBLE RESPONDENTS

#### 1) PROFILE OF HOUSEHOLD SURVEY

a. The Korean household survey, covering 21,252 sample households, enumerated 104,893 persons, 98.6 per cent of whom were usual residents though not necessarily present the night before. 1,431 persons were temporary visitors.

b. The age-sex composition of the household members enumerated in the household survey was similar to that obtained in the 1970 census with the exception in the ages 20-24 for the males. This undercount was due to the exclusion from the sampling frame of the special enumeration districts containing military installations.

c. Age-reporting in the household survey appears to be quite accurate as suggested by the low Meyer's index value for both males (5.1) and females (3.5). This index measures the degree of digital preference in age-reporting, with low scores such as those calculated for this survey indicating little digital preference.

d. The distribution of the surveyed population by size of community basically resembles the preliminary counts from the 1975 census. While there appears to be slight under-representation of the village population and an over-representation of the town population in the survey, the distribution by broad urban and rural classification is virtually identical between the two sources of data: 48 per cent urban and 52 per cent rural.

e. A comparison of the age-sex structures of the different sized communities, as obtained in the survey, reveals contrasting patterns between the cities and towns at one end and the villages at the other end. The cities and towns have relatively more persons in the productive ages, 15-59, and fewer persons in the dependent ages, under 15 and 60 and over, as compared to the villages. In comparing the population pyramids, the deficit of males in the ages 20-24 shows up clearly in every type of community and the base representing recent births is relatively wider for the cities and towns than for the villages, reflecting the larger proportion of persons in the productives (and hence, reproductive) ages in the former as compared to the latter.

f. The proportion ever-married by five-year age group covering the reproductive years, 15-49, is very close between the survey and the 1970 census, indicating the adequacy of the 1974 household survey as a sampling frame for the individual survey, which was based on a subsample of the ever-married women 15-49 who were enumerated in the household survey.

g. In both the survey and the 1970 census, no schooling was reported for about 13 per cent of the males and 25 per cent of the females in the ages 6 and over. The proportion of college-educated too was nearly identical between the two data sources, but the proportion with primary education was slightly under-represented as the proportion with middle and high school education was slightly over-represented in the survey as compared to the 1970 census.

h. In general, we can conclude that the 1974 household survey sample reflects quite closely the universe from which it was drawn, as the comparison of several characteristics between the surveyed population and the population enumerated in either the 1970 or 1975 census reveals.

TABLE 1. AGE AND SEX COMPOSITION OF THE 1974 HOUSEHOLD SURVEY POPULATION COMPARED TO POPULATION CENSUSES OF 1966 AND 1970

| Age | Male | | | Female | | | Ses ratio | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1966 Census | 1970 Census | 1974 KNFS | 1966 Census | 1970 Census | 1974 KNFS | 1966 Census | 1970 Census | 1974 KNFS |
| 0-4 | 15.8 | 14.1 | 14.4 | 14.9 | 13.3 | 13.2 | 107.2 | 106.8 | 106.4 |
| 5-9 | 16.3 | 14.9 | 13.6 | 15.3 | 13.9 | 12.5 | 107.6 | 107.6 | 105.8 |
| 10-14 | 12.7 | 14.4 | 14.0 | 12.0 | 13.5 | 12.9 | 107.2 | 107.3 | 106.2 |
| 15-19 | 9.5 | 10.0 | 11.5 | 9.0 | 9.7 | 10.8 | 106.9 | 103.8 | 104.3 |
| 20-24 | 8.2 | 8.2 | 5.6 | 7.6 | 7.8 | 7.8 | 109.9 | 106.1 | 70.2 |
| 25-29 | 7.6 | 6.9 | 7.1 | 7.8 | 7.1 | 7.5 | 98.9 | 99.0 | 93.0 |
| 30-34 | 6.7 | 7.0 | 7.3 | 6.8 | 6.9 | 6.3 | 99.22 | 102.2 | 112.3 |
| 35-39 | 5.0 | 5.8 | 6.6 | 5.7 | 6.0 | 6.2 | 89.7 | 97.4 | 104.1 |
| 40-44 | 4.5 | 4.4 | 5.1 | 4.7 | 4.9 | 5.2 | 95.9 | 89.7 | 96.3 |
| 45-49 | 3.8 | 4.0 | 3.9 | 3.3 | 4.2 | 4.2 | 100.6 | 95.9 | 91.7 |
| 50-54 | 3.2 | 3.2 | 3.4 | 3.3 | 3.3 | 3.8 | 96.6 | 97.8 | 88.3 |
| 55-59 | 2.5 | 2.6 | 2.6 | 2.8 | 2.9 | 2.8 | 91.3 | 91.2 | 91.2 |
| 60-64 | 1.7 | 1.9 | 1.9 | 2.1 | 2.3 | 2.3 | 81.9 | 83.3 | 79.7 |
| 65-69 | 1.2 | 1.1 | 1.4 | 1.8 | 1.6 | 1.9 | 71.8 | 71.6 | 71.6 |
| 70-74 | 0.7 | 0.7 | 0.7 | 1.1 | 1.2 | 1.2 | 64.7 | 62.1 | 57.5 |
| 75-79 | 0.4 | 0.4 | 0.4 | 0.8 | 0.7 | 0.8 | 56.9 | 53.2 | 51.8 |
| 80+ | 0.2 | 0.4 | 0.4 | 0.4 | 0.7 | 0.6 | 52.1 | 45.9 | 40.3 |
| Unknown | - | - | 0.1 | - | - | - | - | - | - |
| All ages | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Index of dissimilarity[a] (1970 v. 1974) | | 4.4 | | | 2.9 | | | | |

[a] Index of dissimilarity = 1/2 the sum of absolute differences between the percentages in each age group for 1970 1974

The calculated value represents the number of percentage points that must be shifted between the two distributions to make them equal. Hence, the lower the value the more similar the distributions under comparison.

Source: 1) 1966 Population Census Report of Korea, 12-1 Whole Country, Bureau of Statistics, Economic Planning Board, Seoul, May 1969.
2) 1970 Population and Housing Census Report, Vol. 1, Whole Country, Bureau of Statistics, Economic Planning Board, Seoul, November 1973.
3) 1974 KNFS, Table II.1

TABLE 2. PERCENTAGE DISTRIBUTION OF POPULATION BY SIZE OF COMMUNITY: 1974 HOUSEHOLD SURVEY COMPARED TO 1975 CENSUS

| Size of Community | Total | | Male | | Female | |
|---|---|---|---|---|---|---|
| | 1974 Survey | 1975 Census | 1974 Survey | 1975 Census | 1974 Survey | 1975 Census |
| Urban: | 48 | 48 | 47 | 48 | 48 | 48 |
| Seoul | 20 | 20 | 19 | 20 | 20 | 20 |
| Pusan | 8 | 7 | 8 | 7 | 8 | 7 |
| Large city | 7 | 8 | 7 | 8 | 7 | 8 |
| Medium city | 9 | 9 | 9 | 9 | 9 | 9 |
| Small city | 4 | 4 | 4 | 4 | 4 | 4 |
| Rural: | 52 | 52 | 53 | 52 | 52 | 52 |
| Town | 7 | 11 | 7 | 11 | 7 | 11 |
| Village | 45 | 41 | 46 | 41 | 45 | 41 |
| Total | 100% | 100% | 100% | 100% | 100% | 100% |

Source: 1) Preliminary Count of 1975 Population and Housing Census, Bureau of Statistics, Economic Planning Board, Seoul, March 1976
2) 1974 KNBS, Table II.1

TABLE 3. PERCENTAGE DISTRIBUTION OF POPULATION BY THREE MAJOR AGE GROUPS BY SIZE OF COMMUNITY: 1974 HOUSEHOLD SURVEY

| Age group | Whole nation | Size of community: Seoul | Pusan | Large city | Medium city | Small city | Town | Village |
|---|---|---|---|---|---|---|---|---|
| Under 15 | 40 | 36 | 38 | 37 | 40 | 40 | 42 | 43 |
| 15-59 | 54 | 60 | 58 | 59 | 56 | 56 | 53 | 49 |
| 60 and over | 6 | 4 | 4 | 4 | 4 | 4 | 5 | 8 |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

Source: 1974 KNFS, Table II.1

TABLE 4. PERCENTAGE OF WOMEN EVER-MARRIED IN EACH AGE GROUP IN THE REPRODUCTIVE YEARS: 1974 HOUSEHOLD SURVEY COMPARED TO 1970 CENSUS

| Age of women | Percentage ever-married: 1974 HHS | 1970 census |
|---|---|---|
| 15-19 | 3.3 | 2.9 |
| 20-24 | 44.6 | 42.8 |
| 25-29 | 90.1 | 90.3 |
| 30-34 | 98.6 | 98.5 |
| 35-39 | 99.4 | 99.6 |
| 40-44 | 99.7 | 99.9 |
| 45-49 | 99.7 | 99.8 |
| All ages 15-49 | 67.2 | 68.5 |

Source: 1) 1970 Population and Housing Census Report, Vol. 1, Whole Country, Bureau of Statistics, Economic Planning Board, Seoul, November 1973.
2) 1974 KNFS, Table II.3

2) PROFILE OF ELIGIBLE RESPONDENTS

a. The individual survey, based on 5,420 ever-married women in the ages 15-49 -- a subsample of the ever-married women in these ages enumerated in the household survey, provides the basis for much of the analysis presented in this report, dealing with fertility and family planning as related to several demographic and socioeconomic background variables.

b. The two most important demographic variables that must be controlled when examining the relationship of socioeconomic background characteristics to fertility or family planning are: age and marital duration. These two variables are closely related to fertility and family planning and to some of the background characteristics in distinctive ways and therefore must be taken into account in any analysis involving fertility or family planning, on the one hand, and socioeconomic characteristics, on the other. The background characteristics too are interrelated in such a way as to sometimes confound the analysis of the relationship between a given characteristics and fertility or family planning. In this section, an attempt was made

to show (1) the age and marital duration composition of the women classified by several background characteristics to be examined in this report and (2) the relationship of some of the background characteristics to each other.

c. The age distribution of the 1974 individual survey sample is virtually identical with the age distribution of ever-married women 15-49 in the 1970 census, indicating that the former provides an adequate representation of the universe from which it was drawn.

d. To give a profile of the respondents, we can summarize some of their background characteristics as follows:

1. Current residence: 52 per cent resided in cities, 8 per cent in towns, and 40 per cent in villages.
2. Education: 21 per cent reported no schooling but 79 per cent had more than primary level education, with 3 per cent reporting college-level education.
3. Religion: 61 per cent reported no religious preference, 24 per cent are Buddhists, 10 per cent Protestants, 4 per cent Catholics, and 1 per cent "others" such as Confucianists.
4. Husband's occupation: 35 per cent were in agriculture, 32 per cent in white-collar jobs (professional and

managerial, 9%; clerical, 7%); and sales and services, 15%), 32 per cent in nonagricultural, manual jobs (skilled, 25%; and unskilled, 7%), and 2 per cent had never worked.

5. Wife's work experience: 48 per cent were working at the time of interview, 12 per cent had worked since marriage though not now working, 18 per cent had worked only before marriage, and 22 per cent had never worked.

e. Educational attainment is closely related to both age and marital duration. The non-schooled are concentracted in the older ages and the older marriage cohorts. The better educated by contrast are younger in age and tend to be in the more recent marriage cohorts as well, due both to the recency of improvement of educational opportunities in Korea--for women, in particular--and to the tendency of the better educated to marry late. The college-educated in particular are grossly underrepresented in the youngest age category due to the fact that they generally tend to marry late and most of them would not be eligible for this survey.

f. Type of place of residence is also closely related to both age and marital duration. The city residents tend to be younger and more recently married as compared to the village residents, with the town residents in-between. Educational composition varies also by type of place of residence. The city residents are generally better educated than the town residents, who in turn are better educated than the village residents.

TABLE 5. PERCENT DISTRIBUTION BY AGE OF EVER-MARRIED WOMEN 1974 KNFS COMPARED TO 1970 CENSUS

| Age | 1974 KNFS | 1970 Census |
|---|---|---|
| 15-19 | 1 | 1 |
| 20-24 | 10 | 10 |
| 25-29 | 22 | 20 |
| 30-34 | 20 | 22 |
| 35-39 | 19 | 19 |
| 40-44 | 16 | 15 |
| 45-49 | 12 | 13 |
| All ages | 100% | 100% |
| Index of dissimilarity[a] | | 3.0 |

[a]See note under Table 1 for meaning of this index.

Source: 1) 1970 Population and Housing Census Report, Vol. 1, Whole Country, Bureau of Statistics, Economic Planning Board, Seoul, Nov. 1973.
2) 1974 KNFS, Table I.1.1

TABLE 6. PERCENT DISTRIBUTION OF 1974 KNFS SAMPLE BY MARITAL DURATION

| Marital duration | Per cent |
|---|---|
| Less than 5 years | 22 |
| 5-9 years | 19 |
| 10-14 years | 15 |
| 15-19 years | 15 |
| 20-24 years | 12 |
| 25-29 years | 10 |
| 30 years or more | 7 |
| All durations | 100% |

Source: 1974 KNFS, Table 1.2.1

TABLE 7. PERCENTAGE DISTRIBUTION OF EVER-MARRIED WOMEN BY AGE, WITHIN CATEGORIES OF SELECTED BACKGROUND VARIABLES: INDIVIDUAL SURVEY

| Background characteristics | Number | Per cent | Percentage distribution | | | | |
|---|---|---|---|---|---|---|---|
| | | | All ages | Under 25 | 25-34 | 35-44 | 45 or over |
| All women | 5,420 | 100 | 100 | 11 | 42 | 35 | 12 |
| Education: | | | | | | | |
| None | 1,135 | 21 | 100 | 1 | 18 | 50 | 31 |
| Primary | 2,713 | 50 | 100 | 13 | 42 | 36 | 9 |
| Middle | 803 | 15 | 100 | 20 | 62 | 17 | 1 |
| High | 594 | 11 | 100 | 12 | 54 | 28 | 6 |
| College | 165 | 3 | 100 | 4 | 57 | 24 | 15 |
| Current residence: | | | | | | | |
| City | 2,834 | 52 | 100 | 11 | 48 | 31 | 10 |
| Town | 410 | 8 | 100 | 12 | 41 | 35 | 12 |
| Village | 2,176 | 40 | 100 | 11 | 34 | 40 | 15 |
| Religion: | | | | | | | |
| None | 3,334 | 61 | 100 | 13 | 42 | 34 | 11 |
| Buddhist | 1,277 | 24 | 100 | 8 | 39 | 38 | 15 |
| Protestant | 526 | 10 | 100 | 12 | 43 | 33 | 12 |
| Catholic | 203 | 4 | 100 | 9 | 44 | 32 | 15 |
| Other | 80 | 1 | 100 | 4 | 39 | 43 | 14 |
| Husband's occupation: | | | | | | | |
| Prof. and manag. | 496 | 9 | 100 | 9 | 46 | 34 | 11 |
| Clerical | 402 | 7 | 100 | 11 | 49 | 29 | 11 |
| Sales and service | 821 | 15 | 100 | 11 | 46 | 33 | 10 |
| Agricultural | 1,851 | 35 | 100 | 10 | 31 | 42 | 18 |
| Skilled | 1,339 | 25 | 100 | 15 | 49 | 28 | 8 |
| Unskilled | 353 | 7 | 100 | 8 | 45 | 37 | 10 |
| Never worked | 93 | 2 | 100 | 14 | 55 | 23 | 8 |
| Pattern of work: | | | | | | | |
| Current and before marriage | 1,402 | 25 | 100 | 8 | 38 | 42 | 12 |
| Current, not before marriage | 1,267 | 23 | 100 | 5 | 28 | 46 | 21 |
| Not current, before & after marriage | 359 | 7 | 100 | 12 | 51 | 28 | 9 |
| Not current, after marriage only | 253 | 5 | 100 | 5 | 29 | 44 | 22 |
| Not current, before marriage only | 968 | 18 | 100 | 24 | 58 | 14 | 4 |
| Never worked | 1,166 | 22 | 100 | 12 | 46 | 33 | 9 |

Source: 1974 KNFS, Table 1.2.2, 1.6.3

## B. NUPTIALITY AND EXPOSURE TO CHILD-BEARING

### 1) AGE AT MARRIAGE

The singulate mean age at marriage calculated from data on proportion never married at each age obtained in the 1974 household survey can be compared with similar means calculated from censuses in previous years.* Mean age at marriage for males has risen steadily from 21.1 in 1935 to 26.7 by 1966 and to 27.1 in 1970 and 27.2 in 1974 as shown in Table 8. For females, it has risen from 17.1 in 1935 to 22.8 by 1966 and to 23.3 in 1970 and 23.2 in 1974. For both sexes, there is hint of stabilization since 1970. Interestingly, the age difference at marriage between males and females has remained more or less constant over these years at about 4 years on the average.

Mean age at marriage can be calculated for each age cohort for women interviewed in the individual survey, although generalizations with regard to trends must be made with caution because of the problems of gross censoring of data inherent in a sample confined to ever-married women. Table 9 summarizes the data.

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*The singulate mean age at marriage is an indirect estimate of the mean age at first marriage. It is based on data on marital status by age. For a description of the method, see Henry S. Shryock, Jacob S. Siegel, and Associates, The Methods and Materials of Demography, Volume 1, Washington, D.C.: U.S. Bureau of the Census, 1971, p. 295.

TABLE 8. SINGULATE MEAN AGE AT MARRIAGE FOR MALES AND FEMALES: 1974 HOUSEHOLD SURVEY COMPARED TO EARLIER CENSUSES

| Year | Male | Female | Difference in years |
|---|---|---|---|
| 1935 Census[1/] | 21.1 | 17.1 | 4.0 |
| 1955 Census[2/] | 24.5 | 20.5 | 4.0 |
| 1960 Census[3/] | 26.4 | 21.6 | 4.8 |
| 1966 Census[4/] | 26.7 | 22.8 | 3.8 |
| 1970 Census[5/] | 27.1 | 23.3 | 3.8 |
| 1974 HHS[6/] | 27.2 | 23.2 | 4.0 |

TABLE 9. MEAN AGE AT FIRST MARRIAGE BY CURRENT AGE: ALL EVER-MARRIED WOMEN (1974 INDIVIDUAL SURVEY): AND PERCENTAGE EVER-MARRIED (1974 HOUSEHOLD SURVEY)

| Current age | Mean age at first marriage | Per cent ever-married |
|---|---|---|
| 15-19 | 17.1 | 3.3 |
| 20-24 | 20.0 | 44.6 |
| 25-29 | 21.7 | 90.1 |
| 30-34 | 21.3 | 98.6 |
| 35-39 | 20.0 | 99.4 |
| 40-44 | 18.4 | 99.7 |
| 45-49 | 17.1 | 99.7 |
| All ages | 20.0 | 67.2 |

Source:
1/ Choson Chongdukbu, 1935 Population Census Report (Whole Korea), 1939, p. 86-87
2/ Ministry of HOme Affairs, Korea, 1955 The First General Population Census, 1959, p. 70-71
3/ Economic Planning Board, Korea, 1960 Population and Housing Census of Korea, Vol. I, II-1, 1963, p.
4/ Economic Planning Board, Korea, 1966 Population Census Report of Korea, Vol. 1, 12-1, 1969, p. 68-69.
5/ Economic Planning Board, Korea, 1970 Population and Housing Census Report, Vol. 1, 12-1, 1973. p. 114-115.
6/ 1974 KNFS, Table II.3

If attention is focused on the age groups above 25, the rise in age at marriage noted earlier is demonstrated here also. Mean age at marriage for women currently aged 45-49 was 17.1, as compared to 21.7 for women currently aged 25-29. The age groups under 25 suffer from censoring effect as those already married are selected by their early marriage and are not fully representative of those in these ages. The bias is reflected in the low calculated mean for these age groups: 17.1 and 20.0, respectively, for ages 15-19 and 20-24. The last column in Table 9 gives the proportion ever-married by age group, based on the household survey, and can be used as a reference in assessing the meaning-fulness of the calculated mean age at marriage in each age group.

Differentials in women's age at first marriage can be examined by two variables using household data: size of community and education. The singulate mean age at marriage for women by these background variables can be calculated from data on proportion single by age group as presented in Table 10. Mean age at marriage for women is higher the larger and more urban the community. Women in Seoul, for example, married on the average at 24.1 as compared to women in villages who married on the average at 22.8. The women in other types of communities generally rank themselves between

these two extremes more or less in order of community size, though the differences are not large.

Educational differentials are much more marked. The college-educated and those with high school education, for example, married on the average at 25.6 and 25.0, respectively, as compared to those without any schooling who married on the average at 21.3. The others are intermediate to these: those with primary education marrying at 21.9 and those with middle school education at 22.8.

The individual survey data permit the exploration of differentials in mean age at marriage by several other background characteristics, though interpretation must be tempered somewhat by the censoring effect noted earlier. In order to remove some of the consoring effect, mean age at marriage is calculated for only those who were age 25 or older at interview and who had married before age 25 (about 80 per cent of the sample). Such a restriction serves to exclude the youngest cohorts who are selected by their early marriage and the late marriages among the cohorts above age 25, both of which suffer from gross censoring effects. The analysis of differentials in mean age at marriage, based on the individual survey, must therefore exclude observations on the most recent trends and also use data that necessarily underestimate the mean

TABLE 11. MEAN AGE AT FIRST MARRIAGE OF THOSE WOMEN WHO WERE MARRIED BEFORE AGE 25 BY BACKGROUND CHARACTERISTICS AND CURRENT AGE

| Background characteristics | All ages | Current age 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |
|---|---|---|---|---|---|---|
| All women | 21.1 | 20.5 | 19.5 | 18.1 | 16.9 | 19.4 |
| Level of education: | | | | | | |
| No schooling | 17.5 | 19.5 | 19.2 | 18.5 | 17.1 | 16.2 |
| Primary school | 19.5 | 20.7 | 20.4 | 19.6 | 18.3 | 17.2 |
| Middle school | 21.2 | 21.8 | 21.3 | 20.6 | (19.1) | * |
| High school | 21.2 | 21.9 | 21.9 | 21.2 | 19.8 | (19.2) |
| College or higher | 21.9 | (22.9) | * | * | * | (20.2) |
| Childhood type of place: | | | | | | |
| City | 20.5 | 21.7 | 21.2 | 20.7 | 18.7 | 18.3 |
| Town | 19.7 | 21.1 | 20.5 | 19.8 | 18.9 | (17.5) |
| Village | 19.2 | 21.0 | 20.4 | 19.3 | 17.9 | 16.6 |
| Religion: | | | | | | |
| None | 19.4 | 21.1 | 20.4 | 19.4 | 17.9 | 16.6 |
| Buddhist | 19.3 | 21.2 | 20.5 | 19.6 | 18.2 | 16.9 |
| Protestant | 20.0 | 21.4 | 21.0 | 19.9 | 18.8 | 17.9 |
| Catholic | 19.9 | (21.9) | (21.5) | (20.2) | (18.1) | (17.8) |
| Other | 19.2 | * | * | * | (18.0) | * |
| Work status before first marriage: | | | | | | |
| Did not work | 19.0 | 20.9 | 20.3 | 19.4 | 18.0 | 16.8 |
| Self-employed | 20.0 | 21.8 | (21.4) | (21.1) | * | * |
| Family-employed | 19.0 | 20.7 | 20.2 | 19.2 | 17.7 | 16.4 |
| Other-employed | 21.0 | 21.8 | 21.5 | 20.9 | 19.6 | 18.4 |
| Husband's occupation: | | | | | | |
| Never worked | 19.8 | * | (21.7) | * | * | * |
| Professional and managerial | 20.8 | 21.9 | 21.8 | 21.2 | 19.6 | 18.4 |
| Clerical | 20.5 | 22.0 | 21.4 | 20.6 | (18.4) | (18.1) |
| Sales and services | 19.9 | 21.4 | 20.6 | 19.8 | 18.8 | 17.4 |
| Agricultural | 18.5 | 20.4 | 19.9 | 19.0 | 17.4 | 16.3 |
| Skilled manual | 19.9 | 21.1 | 20.9 | 19.3 | 18.6 | 17.1 |
| Unskilled manual | 19.1 | 20.8 | 19.7 | 19.4 | 17.7 | (16.4) |

In this and all subsequent tables in the text, ( ) refers to figures based on less than 50 cases and an asterik (*), to figures based on less on less than 20 cases.

Source: 1974 KNFS, Table 1.1.3

age at marriage for each cohort, especially among those with background characteristics associated with relatively, late marriage. Even with these restrictions, the findings are nevertheless still suggestive of interesting trends. Table 11 summarizes the data. Education has the strongest association with age at marriage. In every age group, the college-educated have the highest average age at marriage and those with no schooling, the lowest. Overall, the mean age at marriage among the college-educated was 21.9, as compared to 17.5 for those with no schooling. The actual differentials are likely to be even greater as witness in Table 12 the fact that the proportion married after age 25 and therefore excluded from the analysis is larger the higher the educational level.

Those who spent their childhood in cities tend to marry slightly later than those who spent their childhood in towns or villages, though the differences are diminished among the more recent cohorts. Differences in mean age at marriage by religious affiliation are small. If anything, the Buddhists and those with no religion tend to marry at slightly younger ages than the Protestant or Catholics, though again the differences are substantially reduced among the most recent cohorts. Some of the religious differences probably

TABLE 12. PERCENTAGE OF WOMEN AGE 25 AND OVER WHO MARRIED AT AGE 25 OR OVER BY EDUCATION

| Education | Per cent married at age 25 or over among women age 25 and over |
|---|---|
| No schooling | 2% |
| Primary | 6% |
| Middle | 16% |
| High | 22% |
| College | 46% |
| Total | 9% |

reflect the urban-rural composition of the different religious groups. As we noted earlier, Buddhists and those with no religion tend to be more rural in composition than any of the Christians.

A higher mean age at marriage is found generally among those who worked before marriage. But if the work was family-related, the mean age at marriage is as low as for those who did not work. These patterns are found in every age group. It is likely that level of education and place of residence influence these patterns.

Wives married to professional and managerial workers tend to have married later than the others. Wives of farmers on the average married earliest. These differentials are evident in every age group.

It is worth nothing in Table 11 that mean age at marriage has risen from the oldest to the youngest cohort in every category of the several background characteristics examined, suggesting that the observed secular trend of rising age at marriage is a pervasive phenomenon affecting every sector of Korean soceity.

2) EXPOSURE STATUS

The composite variable "Exposure status" is defined by five possible categories, based on the WFS guideline. This variable is used to establish a woman's current degree of exposure to the risk of conception. At one extreme is a woman who is currently pregnant; she has zero probability of conceiving in the next month. A women who is not pregnant, is married and living with her husband, and reports that she is able to have children, defines the other extreme.

Exposure status is a useful tool, especially as the concepts of infecundity and exposure will recur in later sections on current contraceptive use and family size intentions.

Table 13 summarizes the distribution according to exposure status by demographic "control variables" - such as age, marriage duration, and parity. About ten per cent of the women report a current pregnancy. Contraceptive sterilization is not particularly

widespread, amounting to 5 per cent of the entire sample. Two-thirds of all ever-married women are exposed (i.e., reported fecund), 7 per cent are currently not married, and the remaining 12 per cent report impaired fecundity. The proportion exposed is highest in the ages 25-34 (78%) or marital durator of 10-14 years (82%), declines slowly up to around age 45 or up to 30 years of marriage and then drops precipitiously after that.

Near 40 per cent of all women with no children to date are currently pregnant. These presumably are predominantly recently married women who are having their first children.

Eleven per cent do report some kind of fecundity impairment, however, suggesting that a significant minority are involuntarily childless. Fecundity impairment increases considerably after parity 3 to 14 per cent for parity 4 and 24 per cent for parity 5 or more.

Differentials in exposure status by background characteristics shown in the bottom panels of Table 13 must be interpreted with caution as they are presented without any age control. Sterilization for contraceptive purposes is most frequent among the college-educated (14%) and the city residents (6%). This is true especially in the ages 35-44. The low rate (4%) of current pregnancy among

TABLE 13. PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO EXPOSURE STATUS, BY DEMOGRAPHIC AND SOCIAL CHARACTERISTICS

| Characteristics | Exposure status | | | | | |
|---|---|---|---|---|---|---|
| | Currently pregnant | Widowed divorced separated | Sterilization for contraception | Other impairment | Reported fecund | Total |
| All women | 10 | 7 | 5 | 12 | 66 | 100 |
| Current age: | | | | | | |
| 15-24 | 28 | 1 | 0 | 0 | 71 | 100 |
| 25-34 | 14 | 2 | 4 | 2 | 78 | 100 |
| 35-44 | 2 | 9 | 7 | 14 | 68 | 100 |
| 45 or more | 0 | 21 | 5 | 55 | 18 | 100 |
| Years since first marriage: | | | | | | |
| Less than 15 | 27 | 1 | 0 | 0 | 71 | 100 |
| 5-9 | 12 | 2 | 5 | 1 | 80 | 100 |
| 10-14 | 6 | 4 | 7 | 2 | 82 | 100 |
| 15-19 | 4 | 6 | 7 | 8 | 76 | 100 |
| 20-24 | 1 | 11 | 7 | 21 | 59 | 100 |
| 25-29 | 1 | 19 | 6 | 35 | 40 | 100 |
| 30 or more | 0 | 23 | 3 | 60 | 14 | 100 |
| No. of living children: | | | | | | |
| 0 | 39 | 6 | 0 | 11 | 44 | 100 |
| 1 | 21 | 9 | 0 | 5 | 64 | 100 |
| 2 | 11 | 6 | 5 | 6 | 73 | 100 |
| 3 | 6 | 6 | 7 | 7 | 68 | 100 |
| 4 | 3 | 6 | 7 | 14 | 69 | 100 |
| 5 or more | 2 | 7 | 5 | 24 | 61 | 100 |
| Level of education: | | | | | | |
| No schooling | 4 | 13 | 4 | 26 | 53 | 100 |
| Primary | 10 | 6 | 4 | 10 | 70 | 100 |
| Middles | 16 | 3 | 6 | 3 | 73 | 100 |
| High | 12 | 4 | 7 | 9 | 68 | 100 |
| College | 10 | 7 | 14 | 6 | 63 | 100 |
| Type of place of residence: | | | | | | |
| City | 10 | 7 | 6 | 11 | 67 | 100 |
| Town | 12 | 7 | 22 | 15 | 64 | 100 |
| Village | 10 | 7 | 3 | 14 | 67 | 100 |

Source: 1974 KNFS, Tables 1.6.1

those without any schooling is strictly a function of the age composition of that group. The higher rate (13%) of marital dissolution and the greater incidence of fecundity impairment (26%) among them too are accounted for primarily--though not completely--by age composition. The consequence, of course is that the proportion exposed (53%) is lowest among those without any schooling.

## C. CURRENT FERTILITY

In Korea, in the absence of a reliable vital statistics reporting system, current fertility rates such as the crude birth rate, age-specific fertility rates and total fertility rate, among others, must necessarily be estimated from periodic sample surveys and the quinquennial national censuses. The present survey permits us to calculate all the standard rates, though in this report we discuss in preliminary fashion only the age-specific fertility rates and the total fertility rate. Two other, indirect measires of the current level of fertility that can be obtained from the survey are the mean number of births in the past five years and the proportion reporting at interview a current pregnancy. These too will be examined briefly.

The exercise of estimating age-specific fertility rates from a retrospective sample survey is not without its hazards. However,

it is still worthwhile to attempt a preliminary estimation of those rates prior to the necessary but time-consuming methodological refinement that is planned for a late date. The estimates are based on a relatively simple procedure. First, the most recent births of the 17,157 ever-married women in the ages 15-49 who were enumerated in the 21,253 households comprising the household survey were classified by date of birth and those occurring in the twelve months preceding the survey date (a total of 2,716 births), distributed by the mother's exact age at interview. The age-distributed births would constitute the numerators in the calculation of the age-specific fertility rates. The use as denominators the number of ever-married women in each of the age groups would yield us age-specific marital fertility rates (ASMFR). For the calculation of age-specific fertility rates (ASFR), the number of all women regardless of marital status in the given age group is used as the denominator. The calculated rates are summarized in Table 15.

The "total" figures in the last two columns in Table 15 are, of course, the total fertility rates for ever-married women and all women, respectively. A total fertility rate (TFR) represents the number of live births that could be expected of a woman if she

were to go through her reproductive years from 15 to 50 exposed to the risk of childbearing represented by the schedule of age-specific fertility rates of a given 12-month period. It should be emphasized that these are tentative estimates based on all too simple assumptions. More refined estimates will be prepared at a later date after the quality of birth and age reporting is systematically assessed. The refined estimates will take into account births and women who are inevitably missed in a retrospective survey due, for example, to deaths in the preceding 12-month period and because it is based on a sample drawn from non-institutional populations, etc.

In spite of the preliminary nature of the estimates, it is remarkable that they are consistent with past trends based on estimates for earlier years from various sources. Table 16 shows the various estimates going back to 1960. While there are some irregularities, the basic trend is one of consistent decline in every age group.

The percentage decline in the ASFR for each age group and the TFR from 1960 to 1974 is presented in Table 17. Table 17 show that decline has been substantial in every age group but particularly in the youngest ages, 15-19--a result primarily due to postponement

of marriage--and in the ages above 30, with the consequence that the TFR declined by as much as 40 per cent in the 14-year period from 1960 to 1974.

The decline in the ages above 30 is clearly due to voluntary control within marriage as marriage has been nearly universal in these ages. In terms of the TFR's, the decline has been nearly as great in the 3-year period between 1971 and 1974 (18%) as in the 5-year period between 1966 and 1971 (19%) and substantially greater than in the 6-year period between 1960 and 1966 (10%).

The 1974 household survey, because of its fairly large sample size, affords us an opportunity to examine the ASFR's and the ASMFR's--and the accompanying TFR's--by the woman's level of education and the size of community where she resides. Tables 18 and 19 summarize the data. While these rates too must be taken as estimates, the patterns of differentials observed here by these characteristics should hold even when the rates are refined as a later date.

The differences in the TFR's, based on the ASFR's for all women regardless of marital status, by the woman's level of education are substantial, as can be seen in Table 18; they go from 4.8 for those with no schooling down to 2.5 for the college educated.

Much of the differences in the TFR's is due to the differences in the ASFR's for the ages below 25 and above 30. In these ages, the ASFR's are substantially lower the higher the education. The differences are especially marked between those with primary level education or less and those with middle school education or more.

The TFR's based on the ASFR's for only the ever-married women by level of education vary in the expected direction (lower the more education) but the differences are much smaller than in the case of the TFR's based on the ASFR's for all women: they go from 5.3 for those without any schooling to 4.4 for the college-educated. The reduced range of variation is due to the fact that the ASFR's within marriage for ages under 30 vary but little by level of education. The comparison of the ASFR's and ASMFR's reveals that a good part of the educational differences in the TFR's for all women is due to the differences in proportion who are married in the ages under 25. It is clearly suggested that the better educated have a substantially lower proportion married in these ages as compared to the less educated.

Variation in the TFR's by size of community is also quite substantial. (See Table 19.) The contrast between Seoul, the rest of the cities, and the rural communities (town and villages) is

marked especially when the TFR's based on the ASFR's for all women regardless of marital status are compared. These TFR's are 2.6 for Seoul and range from 2.9 to 3.6 for other cities and from 4.0 to 4.4 for the rural communities. The TFR's based on the ASFR's for married women only vary in the same direction but within a much narrower range: 3.8 for Seoul, from 4.1 to 4.4 for other cities, and from 4.8 to 5.3 for the rural communities.

The differentials by size of community generally show up for each ASFR, though they are reduced considerably when the ASMFR's are compared. Unlike the situation with level of education, the differentials by size of community cannot by explained away as much by the proportion married in the youngest ages.

Table 20 compares the ASFR's and the TFR's by broad classification of community types--urban and rural--for the period 1960-74. While decline is clearly evident in the both urban and rural areas, it has been substantially greater in the former than in the latter. The TFR declined in the urban areas by 46 per cent from 5.4 in 1960 to 2.9 in 1974 as compared to 36 per cent from 6.7 in 1960 to 4.3 in 1974 in the rural areas. The 1960-74 decline in the ASFR was considerably greater in the urban than in the rural areas in every age group but 20-24 and 25-29, as can be seen from the comparison in Table 21.

TABLE 14. MEAN NUMBER OF CHILDREN BORN WITHIN FIRST FIVE YEARS OF MARRIAGE TO WOMEN MARRIED AT LEAST FIVE YEARS, BY BACKGROUND CHARACTERISTICS AND YEARS SINCE FIRST MARRIED

| Background characteristics | Years since first marriage | | | |
|---|---|---|---|---|
| | All duration | 5-9 | 10-19 | 20 or more |
| Level of education: | | | | |
| No schooling | 1.3 | 2.0 | 1.7 | 1.1 |
| Primary | 1.7 | 2.0 | 1.8 | 1.3 |
| Middle | 1.8 | 2.0 | 1.6 | (1.7) |
| High | 1.8 | 1.9 | 1.8 | 1.7 |
| College | 1.8 | (1.9) | (1.9) | (1.5) |
| Religion: | | | | |
| None | 1.6 | 2.0 | 1.7 | 1.2 |
| Buddhist | 1.6 | 2.0 | 1.7 | 1.3 |
| Protestant | 1.7 | 2.1 | 1.9 | 1.4 |
| Catholic | 1.6 | (2.1) | (1.6) | 1.4 |
| Occupation before first marriage: | | | | |
| Not worked | 1.6 | 2.0 | 1.7 | 1.3 |
| Professional and clerical | 1.8 | 1.9 | 1.8 | 1.7 |
| Sales and service | 1.7 | 1.8 | 1.7 | * |
| Agricultural | 1.6 | 2.0 | 1.7 | 1.2 |
| Manual labor | 1.8 | 2.0 | 1.7 | 1.4 |

Source: 1974 KNFS, Table 2.4.7

TABLE 15. AGE-SPECIFIC FERTILITY RATES AND AGE-SPECIFIC MARRITAL FERTILITY RATES: 1974 HOUSEHOLD SURVEY

| Age | No. of births | No. of ever-married women | No. of all women | ASMFR[a/] | ASFR |
|---|---|---|---|---|---|
| 15-19 | 63 | 190 | 5,765 | 353.7 | 10.9 |
| 20-24 | 673 | 1,891 | 4,233 | | 159.0 |
| 25-29 | 1,102 | 3,601 | 3,999 | 306.0 | 275.6 |
| 30-34 | 550 | 3,302 | 3,348 | 166.6 | 164.3 |
| 35-39 | 242 | 3,251 | 3,272 | 74.4 | 74.0 |
| 40-44 | 79 | 2,726 | 2,734 | 29.0 | 28.9 |
| 45-49 | 7 | 2,196 | 2,204 | 3.2 | 3.2 |
| Total | 2,716 | 17,157 | 25,555 | 4.7[b/] | 3.6[b/] |

a/ per 1,000 women

b/ Total fertility rate per woman

Source: 1974 KNFS, Table II.1, II.3

TABLE 16. AGE-SPECIFIC FERTILITY RATES FROM VARIOUS SOURCES: 1960-1974

(per 1,000 women)

| | 1960 Census 1/ | 1966 SDS 2/ | 1968 Survey 3/ | 1970 Census 4/ | 1971 Survey 5/ | 1973 Survey 6/ | 1974 HHS 7/ |
|---|---|---|---|---|---|---|---|
| 15-19 | 37 | 15 | 7 | 13 | 7 | 10 | 11 |
| 20-24 | 283 | 205 | 146 | 168 | 182 | 146 | 159 |
| 25-29 | 330 | 380 | 301 | 278 | 325 | 301 | 276 |
| 30-34 | 257 | 242 | 201 | 189 | 215 | 220 | 164 |
| 35-39 | 196 | 150 | 120 | 101 | 115 | 88 | 74 |
| 40-44 | 80 | 58 | 65 | 39 | 42 | 19 | 29 |
| 45-49 | 14 | 7 | 7 | 7 | 10 | 3 | 3 |
| Total fertility rate (per woman) | 6.0 | 5.4 | 4.2 | 3.9 | 4.4 | 3.9 | 3.6 |

Source: 1/ Estimated by B.M. Lee, "The Impact of Marital Age Distribution (Age of First Marriage), Induced Abortion and Family Planning Program on Fertility" Annual Report of Family Planning, Seoul: The National Family Planning Center, Vol. I, 1970, p. These rates are closely corroborated by estimates independently derived using the "own children" method by Lee Jay Cho in Estimates of Current Fertility for the Republic of Korea and Its Geographical Subdivisions, 1959-70, Seoul: Yonsei University Press, 1974, p. 19 (Table 4).

2/ E.H. Choe, and J.S. Park, Some Findings from the Special Demographic Survey, 1966, Seoul: Bureau of Statistics of the Economic Planning Board and the Seoul National University Population and Development Studies Center, 1969. pp.

3/ The 1968 Korean Fertility and Family Planning Survey, Seoul: The National Family Planning Center, 1970, pp.

4/ "Own-Children" estimates from the 1970 census by Lee Jay Cho in "The Demographic Situation in Korea," Honolulu: East-West Population Institute, 1973, pp.

5/ An Interim Report on 1971 Fertility-Abortion Survey, Seoul: Korean Institute for Family Planning, 1973, pp.

6/ 1973 National Family and Fertility Survey, Seoul: Korean Institute for Family Planning, 1974, pp.

7/ 1974 KNFS, Table,II-9.

TABLE 17. PERCENT DECLINE IN THE AGE-SPECIFIC FERTILITY RATES AND THE TOTAL FERTILITY RATE: 1960-1974

| Age | 1960 | 1974 | Per cent change: 1960-74 |
|---|---|---|---|
| 15-19 | 37 | 11 | -70% |
| 20-24 | 283 | 159 | -44% |
| 25-29 | 330 | 276 | -16% |
| 30-34 | 257 | 164 | -36% |
| 35-39 | 196 | 74 | -62% |
| 40-44 | 80 | 29 | -63% |
| 45-49 | 14 | 3 | -79% |
| TFR | 6.0 | 3.6 | -40% |

Source: See Table 16 above.

TABLE 18. AGE-SPECIFIC FERTILITY RATES AND AGE-SPECIFIC MARITAL FERTILITY RATES BY WOMEN'S LEVEL OF EDUCATION: 1974 HOUSEHOLD SURVEY

(Per 1,000 women)

| Age | All women | Women's level of education | | | | |
|---|---|---|---|---|---|---|
| | | No schooling | Primary | Middle | High | College |
| | | Age-Specific fertility rates | | | | |
| 15-19 | 11 | 61 | 20 | 5 | 2 | - |
| 20-24 | 159 | 244 | 212 | 163 | 81 | 47 |
| 25-29 | 276 | 291 | 286 | 266 | 254 | 304 |
| 30-34 | 164 | 206 | 173 | 156 | 131 | 64 |
| 35-39 | 74 | 107 | 75 | 38 | 35 | 40 |
| 40-44 | 29 | 41 | 25 | 13 | 18 | 14 |
| 45-49 | 3 | 5 | 1 | - | - | |
| | | Age-specific marital fertility rates | | | | |
| 15-19 20-24 | 354 | 391 | 387 | 336 | 313 | 342 |
| 25-29 | 306 | 305 | 301 | 292 | 318 | 388 |
| 30-34 | 167 | 207 | 174 | 156 | 137 | 67 |
| 35-39 | 74 | 108 | 75 | 38 | 36 | 40 |
| 40-44 | 29 | 42 | 26 | 13 | 18 | 14 |
| 45-49 | 3 | 5 | 1 | - | - | |
| TFR[a/] | 4.7 | 5.3 | 4.7 | 4.2 | 4.1 | 4.4 |

a/ calculated from ASFR's and ASMFR's carried to one declimal place and given per women.

Source: 1974 KNFS, Table II.1, II.3

TABLE 19. AGE-SPECIFIC FERTILITY RATES AND AGE-SPECIFIC MARITAL FERTILITY RATES BY SIZE OF COMMUNITY: 1974 HOUSEHOLD SURVEY

(per 1,000 women)

| Age | All women | Size of community: Seoul | Pusan | Large city | Medium city | Small city | Town | Village |
|---|---|---|---|---|---|---|---|---|
| | | | | Age-specific fertility rates | | | | |
| 15-19 | 11 | 6 | 2 | 4 | 16 | 14 | 10 | 17 |
| 20-24 | 159 | 102 | 177 | 135 | 175 | 143 | 199 | 191 |
| 25-29 | 276 | 240 | 291 | 257 | 276 | 291 | 273 | 304 |
| 30-34 | 164 | 120 | 95 | 132 | 169 | 160 | 192 | 208 |
| 35-39 | 74 | 30 | 56 | 38 | 38 | 98 | 76 | 108 |
| 40-44 | 29 | 14 | 10 | 5 | 19 | 20 | 38 | 41 |
| 45-49 | 3 | 3 | - | 7 | - | - | 10 | 4 |
| TFR[a/] | 3.6 | 2.6 | 3.2 | 2.9 | 3.5 | 3.6 | 4.0 | 4.4 |
| | | | | Age-specific marital fertility rates | | | | |
| 15-19, 20-24 | 354 | 309 | 338 | 355 | 339 | 288 | 348 | 374 |
| 25-29 | 306 | 283 | 318 | 287 | 297 | 310 | 304 | 327 |
| 30-34 | 167 | 124 | 96 | 133 | 171 | 162 | 192 | 210 |
| 35-39 | 74 | 31 | 57 | 38 | 38 | 93 | 76 | 108 |
| 40-44 | 29 | 14 | 10 | 5 | 19 | 20 | 39 | 41 |
| 45-49 | 3 | 3 | - | 7 | - | - | 7 | 4 |
| TFR[a/] | 4.7 | 3.8 | 4.3 | 4.1 | 4.3 | 4.4 | 4.8 | 5.3 |

a/ calculated from ASFR's and ASMFR's carried to one decimal place and given per woman.

Source: 1974 KNFS, Table II.1, II.3.

TABLE 20. AGE-SPECIFIC FERTILITY RATES BY URBAN AND RURAL RESIDNECE: 1960-1974

(per 1,000 women)

| Year | Age of women | | | | | | | TFR (per women) |
|---|---|---|---|---|---|---|---|---|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | |
| **Urban** | | | | | | | | |
| 1960 | 22 | 223 | 316 | 250 | 184 | 81 | - | 5.4 |
| 1966 | 4 | 119 | 278 | 209 | 92 | 48 | 8 | 3.7 |
| 1968 | 6 | 113 | 297 | 169 | 77 | 28 | - | 3.5 |
| 1970 | 8 | 141 | 258 | 141 | 63 | 18 | 3 | 3.1 |
| 1973 | 7 | 104 | 284 | 195 | 50 | 13 | 6 | 3.3 |
| 1974 | 6 | 135 | 262 | 129 | 42 | 13 | 2 | 2.9 |
| **Rural** | | | | | | | | |
| 1960 | 48 | 291 | 354 | 308 | 237 | 115 | - | 6.7 |
| 1966 | 16 | 243 | 424 | 284 | 228 | 96 | 12 | 6.5 |
| 1968 | 8 | 178 | 305 | 220 | 147 | 87 | 11 | 4.8 |
| 1970 | 17 | 189 | 291 | 212 | 126 | 50 | 7 | 4.4 |
| 1971 | 9 | 211 | 363 | 266 | 144 | 49 | 4 | 5.2 |
| 1973 | 14 | 206 | 324 | 249 | 117 | 25 | 5 | 4.7 |
| 1974 | 16 | 192 | 298 | 206 | 103 | 41 | 4 | 4.3 |

Source: See Table 16 above.

TABLE 21. PERCENT DECLINE IN THE AGE-SPECIFIC FERTILITY RATES AND THE TOTAL FERTILITY RATE FOR URBAN AND RURAL AREAS: 1960-1974

| Age | Per cent decline in ASFR: 1960-1974 | |
|---|---|---|
| | Urban | Rural |
| 15-19 | -73% | -67% |
| 20-24 | -39% | -34% |
| 25-29 | -17% | -16% |
| 30-34 | -48% | -32% |
| 35-39 | -77% | -57% |
| 40-44 | -84% | -64% |
| Per cent decline in TFR: 1960-74 | -46% | -36% |

Source: See Table 16 above.

## D. CONTRACEPTIVE USE

### 1) CURRENT USE OF CONTRACEPTION

Though it is common to base estimates of the prevalence of current use of contraception on all ever-married women or currently married women, analytical precision is enhanced if women who are unexposed to the risk of conception are excluded. Accordingly, data on current use from this survey are based on currently married non-pregnant women who consider themselves to be fecund plus currently married women whose husbands, or who themselves, have been sterilized for contraceptive purposes. The inclusion of this latter group stems from the view that sterilization is akin to contraception and that sterilized couples may be considered as "exposed" current users. Thus, the exposed women differ from the "fecund" women only in the exclusion of the current pregnant.

Of these 3,849 "exposed" women in the sample, 46 per cent were using a method of contraception at the time of the survey or had been sterilized for contraceptive purposes. As can be seen in Table 22, both age and family size are independently associated with prevalence of current use. Only 17 per cent of women with less than two living children were current users, but this proportion rises dramatically to 47 per cent for those with two children; thereafter it increases only slightly with increasing family size. This pattern suggests that there is scant reliance

on contraception for spacing the first and second child. It is somewhat surprising that current use is not more strongly related to family size among those with 2 or more children, as one would expect that the desire for family limitation would be more intense for those with larger families and that this tendency would be reflected in contraceptive behaviour.

Within each family size group, current use tends to be highest in the 35-39 age group and rather lower among both older and younger women. The salience of the 35-39 age group is particularly marked among women with 3 or 4 children.

The sex composition of the family is also highly associated with current contraceptive practice. The data in Table 23 show that Korean couples are not likely to use contraception much unless they have at least 2 sons. But once they have 2 sons, use becomes quite frequent (60% or more) whether they have only 2 children, or 3, 4, or 5 or more. The absence of a daughter in the family is no deterent to contraceptive practice. The desire for at least 2 sons still exerts a major influence on Korean fertility behaviour.

Differentials in current use by several background characteristics are summarized in Table 24. As with ever-use, educational level emerges as the background variable most closely associated with current use. With a few minor exceptions, the level of use

TABLE 22. PERCENTAGE OF "EXPOSED" WOMEN WHO ARE CURRENTLY USING CONTRACEPTION (INCLUDING STERILIZATION) BY NUMBER OF LIVING CHILDREN AND CURRENT AGE

| Current age | All parities | Number of living children | | | | | |
|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | 5 or more |
| Less than 20 | (18) | * | * | * | - | - | - |
| 20-24 | 19 | 18 | 14 | 28 | * | * | - |
| 25-29 | 36 | 16 | 19 | 44 | 42 | 34 | * |
| 30-34 | 51 | * | (22) | 57 | 57 | 50 | 45 |
| 35-39 | 60 | * | (33) | 60 | 68 | 68 | 52 |
| 40-44 | 52 | * | * | (62) | 46 | 64 | 50 |
| 45-49 | 45 | * | * | * | * | (39) | 46 |
| All ages | 46 | 16 | 17 | 47 | 54 | 57 | 50 |

Source: 1974 KNFS, Table 4.4.2

TABLE 23. PERCENTAGE OF "EXPOSED" WOMEN WHO ARE CURRENTLY USING CONTRACEPTION (INCLUDING STERILIZATION) BY NUMBER OF LIVING CHILDREN AND NUMBER OF LIVING SONS, CONFINED TO WOMEN WITH 1 TO 5 LIVING CHILDREN

| Number of living sons | All parities | Number of living children | | | | |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 or more |
| 0 | 19 | 14 | 22 | (37) | (23) | * |
| 1 | 38 | 20 | 45 | 43 | 46 | 47 |
| 2 | 60 | - | 61 | 60 | 62 | 61 |
| 3 | 59 | - | - | 63 | 64 | 50 |
| 4 | 51 | - | - | - | (61) | 58 |
| 5 or more | 36 | - | - | - | - | * |
| All | 46 | 17 | 47 | 54 | 57 | 54 |

Source: 1974 KNFS, Table 4.4.3

TABLE 24. PERCENTAGE OF "EXPOSED" WOMEN WHO ARE CURRENTLY USING CONTRACEPTION (INCLUDING STERILIZATION) BY BACKGROUND CHARACTERISTICS AND NUMBER OF LIVING CHILDREN

| Background characteristics | All parities | Number of living children | | | | | |
|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | 5 or more |
| All women | 46 | 16 | 17 | 47 | 54 | 57 | 50 |
| Level of education: | | | | | | | |
| No schooling | 45 | * | * | (28) | 56 | 52 | 42 |
| Primary | 43 | 4 | 11 | 41 | 48 | 55 | 51 |
| Middle | 45 | (21) | 18 | 45 | 59 | 67 | (71) |
| High | 53 | (33) | 22 | 65 | 62 | 70 | (68) |
| College or higher | 62 | * | (46) | (67) | (78) | * | * |
| Type of place of residence: | | | | | | | |
| City | 49 | 21 | 19 | 50 | 60 | 59 | 59 |
| Town | 45 | * | (11) | (43) | (40) | 68 | 51 |
| Village | 42 | 7 | 15 | 39 | 43 | 52 | 47 |
| Religion: | | | | | | | |
| None | 43 | 18 | 15 | 45 | 51 | 53 | 47 |
| Buddhist | 49 | ( 8) | 16 | 46 | 54 | 61 | 56 |
| Protestant | 52 | (21) | 25 | 54 | 63 | 66 | 54 |
| Catholic | 57 | * | 23 | (57) | 64 | (72) | (73) |
| Husband's occupation | | | | | | | |
| Prof. or managerial | 62 | * | 34 | 63 | 68 | 75 | (79) |
| Clerical | 51 | * | 23 | 62 | 59 | (58) | (66) |
| Sales or service | 51 | (19) | 17 | 52 | 62 | 63 | 57 |
| Agricultural | 40 | ( 5) | 12 | 38 | 37 | 53 | 43 |
| Skilled manual | 44 | 17 | 11 | 42 | 56 | 54 | 54 |
| Unskilled manual | 42 | * | * | 33 | 51 | 49 | 48 |
| Pattern of work: | | | | | | | |
| Current and before marria marriage | 45 | (22) | 23 | 49 | 51 | 51 | 46 |
| Current but not before marriage | 48 | * | (10) | 52 | 51 | 61 | 47 |
| Before and after marriage but not current | 44 | * | ( 7) | 44 | 57 | (67) | (50) |
| After marriage but not current | 54 | * | * | (62) | 55 | 52 | (42) |
| Before marriage | 41 | 15 | 19 | 47 | 56 | 48 | (68) |
| Never | 47 | (25) | 16 | 42 | 54 | 59 | 64 |

Source: 1974 KNFS, Table 4.4.5A - 4.4.5E.

within each family size rises with length of formal education. As many of the differences are substantial, it would seem that the convergence in contraceptive behavior between different educational groups, noted in earlier research, is still far from complete. Similarly, there are still large variations in current use between occupational categories. The professional and managerial worker are districtly for their high level and the agricultural and manual workers for their low levels of use. However, no clear pattern of association between women's work experience and current use is discernible.

Differentials in current use according to type of place of residence and religion follow those previously observed for ever-use. The divergenece between city residents and others is confined to couples with small family sizes. However, the slightly higher levels of use of the Christians compared to non-Christians persist even among couples with larger families.

A breakdown of current users by particular method is shown in Table 25. The dominant positions of the pill and loop, which together comprise half of all use, can be clearly seen. The condom and rhythm are the next most prevalent methods; both methods are preferred more by those with small rather than large families. Sterilization accounts for 15 per cent of current users

TABLE 25. THE PERCENT DISTRIBUTION OF CURRENT USERS OF CONTRACEPTION ACCORDING TO SPECIFIC METHOD USED, BY NUMBER OF LIVING CHILDREN

| Number of living children | "Efficient" | | | | | | | | | "Inefficient" | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Pill | IUD | Condom | Male sterilization | Female sterilization | Other female scientific | Injection | Subtotal | Rhythm | Withdrawal | Douche | Abstonence | Subtotal |
| 0,1,2 | 100 | 25 | 19 | 20 | ( 5) | * | * | * | 75 | 16 | 7 | * | * | 25 |
| 3 | 100 | 24 | 21 | 15 | (10) | (6) | * | - | 77 | 14 | 8 | * | * | 23 |
| 4 | 100 | 23 | 24 | 13 | (11) | (5) | * | * | 78 | 13 | 6 | * | * | 22 |
| 5+ | 100 | 24 | 27 | (10) | (11) | (5) | * | - | 79 | 10 | 8 | * | * | 21 |
| All | 100 | 24 | 23 | 15 | 9 | 5 | (1) | (1) | 78 | 13 | 7 | (1) | (1) | 22 |

Source: 1974 KNFS, Table 4.4.1

with vasectomy exceeding tubal ligation by a ratio of two to one. It is interesting to note that couples with four or more children are not more likely to accept sterilization than those with only three children.

Nearly a quarter (22 per cent) of couples are relying on "inefficient" methods-mainly rhythm and withdrawal. The populatity of these methods compared to "efficient" methods does not vary according to family size. In other words, there is no evidence of switching to more reliable methods as the need to limit family size increases.

To enhance the comparability of findings on current use from the present survey with these of previous surveys, the 1974 data have been re-computed for all currently married women aged 15-44, which has been the normal mode of presentation in the past. Some previous national surveys have employed a universe of currently married women aged 20-44, but it is unlikely that the minor discrepancy in the base at the lower end of the age range will distort the comparison seriously.

As can be seen in Table 26, the prevalence of contraceptive practice among currently married women in Korea has nearly doubled since 1966 from 20 per cent to 37 per cent. Comparison of the 1974 survey with the one conducted in 1973 revelas few differences either in the overall level of use or in the use of particular

TABLE 26. PERCENTAGE OF CURRENTLY MARRIED WOMEN WHO WERE USING SPECIFIC METHODS OF CONTRACEPTION (INCLUDING STERILIZATION) AT VARIOUS POINTS IN TIME IN THE LAST 10 YEARS: BY TYPE OF PLACE OF RESIDENCE

| Method | All areas | | | | Urban | | | | Rural | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1966 | 1971 | 1973 | 1974 | 1966 | 1971 | 1973 | 1974 | 1966 | 1971 | 1973 | 1974 |
| IUD | 1 | 7 | 8 | 8 | 1 | 7 | 7 | 8 | 0 | 7 | 9 | 9 |
| Pill | 9 | 7 | 8 | 9 | 9 | 5 | 6 | 9 | 9 | 8 | 10 | 10 |
| Condom | 3 | 3 | 6 | 6 | 4 | 4 | 7 | 7 | 3 | 2 | 6 | 5 |
| Sterilization | 2 | 3 | 5 | 5 | 3 | 4 | 7 | 7 | 2 | 1 | 3 | 3 |
| Other | 5 | 4 | 9 | 9 | 8 | 5 | 12 | 11 | 4 | 3 | 6 | 7 |
| All methods | 20 | 25 | 36 | 37 | 26 | 27 | 39 | 40 | 18 | 23 | 34 | 34 |

Source: 1966: The findings of the national survey on family planning, December 1966. Ministry of Health & Social Affairs.
1971: An interim report on 1971 fertility abortion survey, September 1972. Korean Institute for Family Planning.
1973: 1973 National family planning and fertility survey, December 1974. Korean Institute for Family Planning.

methods. This similarity serves to raise confidence in the results of both of these surveys. There is, however, one interesting difference: in urban areas, use of the pill appears to have increased considerably between 1973 and 1974.

Similarly, the comparison between the 1973 and 1974 survey results for particular age groups reveals only one difference of sufficient magnitude to be of note (see Table 27). In the age group 30-34, there appears to have been a recent increase in current use.

2) PATTERN OF CONTRACEPTIVE USE

By means of a complex variable, "pattern of contraceptive use," an attempt is made to summarize in a concise from the contraceptive experience of all survey respondents. Women have been classified into three major groups - never, past and current users, with further subdivision within each group. As shown in Table 28, 43 per cent of the sample had never used any method, 24 per cent had used in the past but were not currently using, while the remaining 33 per cent were current users.

Never-users are sub-divided into three categories: those who stated an intention to use in the future (18 per cent), those who stated as does not intend to use in the future (12 per cent), and,

TABLE 27. PERCENTAGE OF CURRENTLY MARRIED WOMEN WHO WERE USING CONTRACEPTION (INCLUDING STERILIZATION) AT VARIOUS POINTS IN TIME OVER THE LAST 10 YEARS BY AGE, TYPE OF PLACE OF RESIDENCE AND LEVEL OF EDUCATION

| Characteristics | Calendar year | | | | | |
|---|---|---|---|---|---|---|
| | 1965 | 1966 | 1967 | 1971 | 1973 | 1974 |
| All | 16 | 20 | 20 | 25 | 36 | 37 |
| Current age: | | | | | | |
| 15-24 | na | na | na | 7 | 12 | 13 |
| 25-29 | na | na | na | 15 | 28 | 29 |
| 30-34 | na | na | na | 28 | 38 | 45 |
| 35-39 | na | na | na | 38 | 53 | 54 |
| 40-44 | na | na | na | 27 | 39 | 38 |
| Type of place of residence: | | | | | | |
| Urban | 21 | 26 | 26 | 27 | 39 | 40 |
| Rural | 14 | 18 | 17 | 23 | 36 | 34 |
| Level of education: | | | | | | |
| No schooling | 12 | na | 16 | 21 | 30 | 37 |
| Primary | 17 | na | 22 | 25 | 36 | 36 |
| Middle | 30 | na | 26 | 25 | 37 | 36 |
| High | 31 | na | 37 | 32 | 44 | 44 |
| College | 45 | na | 35 | 38 | 48 | 53 |

na = not available

Source: Same as Table 26.

lastly, those who were not asked the question on, intention because they are no longer fecund or currently married (14 per cent). It is evident from these figures that opposition to contraception is confined to only a small minority of Korean women.

Past but not current users are further classified according to recency of use: 4 per cent had used a method earlier in the open birth interval, 9 per cent in the last closed birth interval and 8 per cent in some earlier interval. A last group, comparising 4 per cent, are now infecund. (They too could have been classified by the interval in which they last used their contraception but were not as priority was given rightly or wrongly to their infecund status.) Current users are simply sub-divided into those sterilized for contraceptive purposes (5 per cent) and users of other methods (28 per cent). There is one topic of fresh interestnamely future intentions which is further explored in Table 29. In this table, the proportions of ever-married neverusers who intend to use in the future are displayed, with cross-classifications by number of living children (omitting those with 7 or more children because the sample sizes are too small) and three key background variables.

Overall, 60 per cent of these 1,620 women stated an intention to practice in the future, and this proportion does not vary according to family size. Variations according to background

TABLE 28. PERCENT DISTRIBUTION OF ALL EVER-MARRIED WOMEN ACCORDING TO PATTERN OF CONTRACEPTIVE USE, BY NUMBER OF LIVING CHILDREN.

| Number of living children | Total | Never used | | | | Poast but not current user | | | | | Current user | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Intends future use | Does not intend future use | Now infecund, widowed, divorced, or separated | Sub-total | In open interval | In last closed interval | Earlier | Now in-fecund | Sub-total | Sterilized for contraceptive purposes | Other method | Sub-total |
| 0 | 100 | 24.0 | 40.6 | 15.8 | 80.5 | 4.5 | 5.5 | 2.1 | 0.3 | 12.4 | 0.2 | 7.1 | 7.1 |
| 1 | 100 | 36.4 | 22.9 | 13.6 | 72.8 | 1.3 | 10.0 | 4.7 | 0.4 | 16.3 | 0.4 | 10.5 | 10.9 |
| 2 | 100 | 23.0 | 9.5 | 8.8 | 41.3 | 2.0 | 10.0 | 8.8 | 1.5 | 22.2 | 4.4 | 32.1 | 36.5 |
| 3 | 100 | 15.6 | 66.6 | 9.0 | 31.2 | 4.9 | 10.2 | 7.6 | 2.9 | 25.6 | 1.8 | 36.4 | 43.2 |
| 4 | 100 | 10.6 | 6.2 | 12.4 | 29.2 | 3.9 | 8.8 | 9.4 | 5.7 | 27.3 | 7.3 | 36.1 | 43.5 |
| 5 | 100 | 9.1 | 7.7 | 15.8 | 32.5 | 5.2 | 7.1 | 8.3 | 7.9 | 28.5 | 6.8 | 32.1 | 38.9 |
| 6 | 100 | 10.4 | 4.8 | 22.0 | 37.5 | 4.0 | 7.6 | 10.6 | 9.8 | 32.1 | 4.5 | 26.3 | 30.8 |
| 7 | 100 | 9.8 | 8.7 | 26.6 | 45.1 | 2.9 | 8.7 | 11.0 | 8.7 | 31.2 | 3.5 | 20.2 | 23.7 |
| 8 | 100 | 6.2 | 10.8 | 32.3 | 49.2 | 1.5 | 9.2 | 7.7 | 9.2 | 27.7 | 3.1 | 20.0 | 23.1 |
| 9+ | 100 | (16.4) | (15.4) | (33.6) | (65.4) | (0.0) | (15.4) | (7.7) | (3.8) | (26.9) | (0.0) | (7.7) | (7.7) |
| All women | 100 | 18.0 | 11.9 | 13.5 | 43.4 | 3.5 | 8.9 | 7.7 | 4.0 | 24.1 | 4.8 | 27.7 | 32.5 |

Source: 1974 KNFS, Table 4.5.3

characteristics are similar to variations in contraceptive behavior; thus the least educated, the rural, and the wives of husband with unskilled manual or agricultural occupations were slightly less likely to report intention to use than the others. However, the differences are slight and the general impression is of the absence of readily identifiable areas of resistance to family planning, assuming that intention will be uninformly translated into action.

TABLE 29. PERCENTAGE EVER-MARRIED NEVER-USED WHO INTEND TO USE CONTRACEPTION IN THE FUTURE BY BACKGROUND CHARACTERISTICS AND NUMBER OF LIVING CHILDREN

| Background characteristics | Number of living children | | |
|---|---|---|---|
| | All parities | 0-4 | 4+6 |
| All | 60 | 61 | 61 |
| Level of education: | | | |
| No schooling | 54 | 49 | 58 |
| Primary | 60 | 60 | 64 |
| Middle | 61 | 60 | * |
| High | 68 | 69 | * |
| College or higher | (62) | (74) | * |
| Type of place of residence; | | | |
| City | 63 | 64 | 55 |
| Town | 63 | 61 | (74) |
| Village | 56 | 54 | 62 |
| Husband's occupation: | | | |
| Professional or managerial | 60 | 60 | * |
| Clerical | 64 | 64 | * |
| Sales and services | 58 | 59 | (53) |
| Agricultural | 58 | 59 | (53) |
| Skilled manual | 64 | 64 | 70 |
| Unskilled manual | 58 | 60 | (52) |

Source: 1974 KNFS, Tables 4.5.6.A-D.

3) SUMMARY

This summary deal with a wide range of topics from knowledge and use of contraception to lactation and induced abortion. The last topic is included in this report because of its recognized importance in recent years in determining fertility levels in Korea.

Knowledge of contraception is widespread in Korea. Ninety-seven per cent of all ever-married women in the present survey reported knowledge of at least one "efficient" method--such as, the pill, the loop, condom, injection, male and female sterilizations, and other female methods like the diaphragm and foam tablets. ("Inefficient" methods include such methods as the rhythm, withdrawal, douche, abstinence, and miscellaneous others.) Compared to 1964* when the first Korean KAP survey reported to level of knowledge of only about 50 per cent, the diffusion of knowledge in the last decade is remarkable.

The best known methods in Korea are the pill (94%), the loop (91%), vasectomy (84%), condom (75%), female sterilization (66%), and rhythm (55%) in that order. All other methods are much less well known, though some under-reporting has to be expected with

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*T.I. Kim, E.H. Choe, U.R. Koh, The Early Stages of Family Planning in Korea, MOHSA, Seoul, 1964.

regard to such methods as the with-drawal, douching, and abstinence.

Use of contraception too is quite widespread in Korea today. Fifty-two per cent have tried at least one of the "efficient" methods and an additional 5 per cent an "inefficient" method only. Use is most frequent (about 70%) in the ages 35-44 and parities 3 to 5. There appears to be under-reporting of use by those in the ages 45 and over, judging from the fact that the surveys in the mid-1960's recorded relatively high level of use for these same part of women who were then aged about 35-39.

Differentials in ever-use follow the usual pattern. Education is the background characteristics that is most closely related to ever-use of contraception. The better educated age more likely to have ever used than the less educated, the distinction being most marked between the non-schooled or primary level education only and those with education beyond the primarly level. This pattern holds within each parity. The city residents are more likely to have used than the town and village residents, although this differential is confined to those with less than 4 children. The women whose husband are in professional or managerial occupations tend to have the highest level of ever use,

with those in agriculture or unskilled manual jobs, the lowest. There is little consistent differences among the other occupations.

Pill has been the most widely used method in Korea (33%), followed by the loop (24%), condom (22%), rhythm (16%), and withdrawal (12%). Current use of contraception was examined for those women who are fecund and exposed to the risk of conception, thus excluding the unmarried, the currently pregnant, and those with reported fecundity impairments other than voluntary sterilization (either vasectomy or female sterilization) for contraceptive purposes. Of the 3,849 "exposed" women, who comprised 71 per cent of the ever-married subject to the individual survey, 46 per cent reported current use of contraception, including sterilization for contraceptive purposes. Current use is associated with both age and family size. It is most frequent for those with two children and those who are in the ages 35-39. It does not necessarily increase much with parity beyond two children. It in fact declines somewhat in the ages 40 and over.

Current use is related quite strongly to the sex composition of the family. Korean couples are not likely to be using contraception much unless they have at least two sons. But once they have two sons use becomes quite frequent (60% or more) whether

they have only two children, or 3, 4, or 5 or more. Not having a daughter does not deter them from use. In short, the desire for at least two sons still exerts a major influence on Korean fertility behaviour.

Differentials in current use of contraception by background characteristics follow very closely the differentials with respect to ever use. Educational differentials are still quite large, suggesting that the convergence in contraceptive behaviour noted in earlier research is far from complete. Occupational differentials too especially between the professional or managerial workers, on the one hand, with high level of use and the agricultural or manual workers, on the other hand, with low level of use are still quite large. Wife's work experience, on the other hand, does not seem to be related to current use in any systematic way. The differentials by place of residence and religion follow those observed for ever users. The differential between city and village residents is confined to those with small families as with the ever users, but the slightly higher levels of use by the Christians as compared to the non-Christians persist ever among those with large families.

The pill and loop are the most popular methods in current use, together comprising half of all use. Condom and rhythm follow in order but are used more by those with small rather than large families (no doubt influenced by age and background characterisitcs). Fifteen per cent are sterilized with vasectomy twice as popular as tubal ligation. Significantly, couples with fewer than 4 children are as likely to accept sterilization as those with 4 or more children. About 22 per cent of the couples are relying on "inefficient" methods--mainly rhythm and withdrawal, and their popularity does not seem to vary by family size. There is no indication of a tendency for couples to switch from "inefficient" to "efficient" methods with increase in family size.

A comparison with previous surveys in Korea shows that current use of contraception has increased nearly two-fold from 1966 to 1974: from 20 per cent to 37 per cent of currently married women in the ages under 45. The overall rate of current use has not increased much between 1973 and 1974, but there appears to have been an increase in pill use in the urban areas. There is also a sizeable increase in reported use in the ages 30-34, from 38 per cent in 1973 to 45 per cent in 1974.

While current use has increased in both urban and rural areas, the differential has remained fairly constant over the past 5 years.

Educational differences too persist, though some convergence is in evidence with a substantial increase in use occurring among those with no schooling in recent years. These changes must be interpreted with some caution, however, because of changes in age composition in the educational categories associated with recent improvements in educational opportunities.

The respondents in the survey were classified by "pattern of contraceptive", which combines in a summary fashion several variables examined separately such as current or past use of contraception and a few new variables such as future intention to use among those who never used so far. In this section, analysis was restricted to the future intentions of the currently married, fecund never-users. Overall, 60 per cent of them stated an intention for future use, with no variation by current family size. Differentials by background characteristics were similar to those observed for current or ever-users. The proportion intending future use was lowest among the least educated, the rural, and the wives whose husband are in agriculture or unskilled manual occupations. The differences, however, were slight, suggesting the absence of readily identifiable areas of resistence to family planning, assuming intention is uniformly translated into action.

An approximate assessment of contraceptive efficacy is obtained by comparing the length of the last closed birth interval and that of the open birth interval between those who ever used contraception in the given intervals and those who did not. The mean length of the last closed birth interval for those with at least 2 live births, including a current pregnancy, is about 17 per cent longer for those who report ever use of contraception in that interval as compared to those who report no use: 41.4 months vs. 35.5 months. This difference holds roughly in all age groups.

The mean length of the open birth interval for the currently married, fecund women with at least one live birth is 86 per cent longer for those who report no use: 56.6 months vs. 30.7 months. The differences are greater in the ages under 35 and much less in the ages 35 and over, suggesting that there may be selectivity in current use by fecundity status among the older women. In the older ages, the more fecund may find themselves using contraception more often, leaving the less fecund among the non-users, thus showing apparently less contraceptive efficacy than may actualy be the case.

In general, it appears that contraceptive efficacy may be greater in terminating childbearing than in spacing. This ten-

tative conclusion is based on the observed greater differential by contraceptive use in length of interval for the open than for the closed birth interval. Such an interpretation, however, ignores any effect lactation or induced abortion may have on the length of these intervals.

The role of lactation was briefly examined in relation to the length of the last closed birth interval. The sample was severely restricted in several ways to remove the possible sources of bias due to truncation of observation. Overall, 94 epr cent of the specially restricted sample of women reported breastfeeding in the last closed birth interval for an average duration of slightly less than 20 months. While breastfeeding is still widespread, there is indication that it may be declining somewhat among the younger women, the better educated, and the city residents. Breastfeeding is related to length of the last closed birth interval only after at least 6 months of breastfeeding. For the noncontraceptors, the mean length of the birth interval is 24.1 months for those who did not breastfeed at all as compared to 23.0 months for those who breastfed for less than 6 months but rises to 26.7 months for those who breastfed for 6 to 12 months to as long as 35.1 months for those who breastfed for 24 months

or longer. The same pattern holds roughly in every age group and for those who ever used contraception in the interval also, with the latter showing gains for about 3 to 4 months in each category of length of breastfeeding over those who never used contraception.

Preliminary findings with regard to induced abortion are included in this report because of its importance in Korean fertility behaviour. Approval of abortion is widespread in both urban and rural areas, with only about 16 per cent disapproving, according to a national sample survey in 1973.

The use of abortion has increased nearly two-fold since 1968 from about 16 per cent of the currently married women in the ages 15-49 in 1968 to about 31 per cent in 1974, but the gain has been greatest between 1968 and 1971, especially among the rural women. The increase since 1971 is evident in every age group but especially in the ages 20-29 and 30-34. Collectively the women in the present survey reported an average of 0.6 abortion, with 30 per cent reporting at least one abortion and 14 per cent, two or more.

Both ever use of abortion and the mean number of abortions are consistently higher the larger the number of non-current pregnancies the woman has had but not so beyond 3 children by number of living children. There is a decline in these figures

after 3 children, though generally they are highest in the parities 3 to 5, suggesting that perhaps use of abortion has helped to keep achieved fertility from increasing further. Of the approximately 23,800 non-current pregnancies reporting by these women, 14 per cent were terminated by induced abortion and 5 per cent by stillbirth or miscarriage. These rates are roughly the same as those reported in the 1971 Fertility and Abortion Survey (12% by abortion and 6% by stillbirth or miscarriage). For 1974 and 1971, the proportions of non-current pregnancies ending in live births were, respecitvely, 81 per cent and 82 per cent.

The rate of termination of non-current pregnancies by induced abortion is highest (at 15%) for those in the ages 25-34 and 35-44. The low rate for those in the ages 45 and over is consistent with the trends in fertility and abortion over the years but some under-reporting must be allowed. The rate of loss due to stillbirths and miscarriages seems certainly to have been under-reported in the older ages.

Resort to abortion is closely associated with use of contraception. Basically, contraceptive users are more likely to have resorted to induced abortion also and the more so, the more recent the use of contraception--such as the current users and those who used in the open interval though not using now. The

number of children is associated with abortion use only for the sterilized. Abortion use among them is higher for those with less than 4 children than those with 4 or more, suggesting that abortion used before sterilization may have helped in keeping their family size relatively small.

The proportion of non-current pregnancies terminated by induced abortion is also higher for the contraceptive users and the more so, the more recent the use. Furthermore, the rate of termination by abortion is substantially higher for those with less than 4 children than those with 4 or more. Abortion appears to have helped in keeping in achieved fertility from increasing further.

Differentials in the use of abortion by background characteristics are similar to those observed for contraceptive users. Both the proportion of abortion users and the proportion of pregnancies terminated by abortion are higher for the better-educated, the city residents, and the non-agricultural workers. The relationship of religion or wife's work experience to use of abortion is difficult to interpret without further, more detailed analysis.

## E. USE OF CONTRACEPTION AS RELATED TO FERTILITY PREFERENCES

Even in societies where contraceptive practice has been widespread for some decades, considerable discordance between attitudes and behaviour can be expected. There are many reasons for this. Husbands may object to the use of contraception, facilities may be too remote, the available methods may not be suitable, side effects may be feared, or supportive social norms may be lacking. Investigation of the reasons for inconsistency between stated attitudes and reported behaviour lies beyond the scope of this report, but it is of interest to contrast the behaviour of those who want and those who do not want more children and to describe the level of inconsistency in attitudes and behaviour among the various segments of the population.

In Table 30, which is based on the 4,385 women currently married, "exposed" women in the sample, the pattern of contraceptive use is tabulated against whether total desired family size has already been reached or not. An interesting finding is that women who report that they have already reached or exceeded their desired family size have markedly higher levels of current use than those whose actual size is still less than their desired size. This pattern holds across all age group except those below age 25.

TABLE 30. PERCENT DISTRIBUTION OF CURRENT MARRIED FECUND WOMEN ACCORDING TO PATTERN OF CONTRACEPTIVE USE, WHETHER TOTAL DESIRED FAMILY SIZE HAS BEEN ACHIEVED AND CURRENT AGE

| | Contraceptive use | | | | |
|---|---|---|---|---|---|
| | | Never used | | | |
| | All | Intends future use | Does not intends future use | Past but not current use | Current use |
| **All ages** | | | | | |
| All | 37 | 22 | 15 | 23 | 40 |
| Desired > Actual | 21 | 12 | 9 | 28 | 51 |
| Desired = Actual | 30 | 18 | 12 | 23 | 48 |
| Desired < Actual | 57 | 35 | 221 | 18 | 25 |
| **Less than 25** | | | | | |
| All | 71 | 43 | 28 | 16 | 13 |
| Desired > Actual | * | * | * | * | * |
| Desired = Actual | (54) | (32) | * | (31) | * |
| Desired < Actual | 73 | 45 | 28 | 13 | 14 |
| **25 - 34** | | | | | |
| All | 38 | 26 | 12 | 25 | 37 |
| Desired > Actual | 25 | 17 | ( 7) | 33 | 43 |
| Desired = Actual | 32 | 21 | 11 | 25 | 44 |
| Desired < Actual | 51 | 34 | 17 | 21 | 28 |
| **35 - 44** | | | | | |
| All | 22 | 10 | 12 | 22 | 55 |
| Desired > Actual | 17 | 9 | 8 | 26 | 57 |
| Desired = Actual | 22 | (11) | (11) | 18 | 60 |
| Desired < Actual | 43 | (13) | 30 | (17) | 40 |
| **45 and over** | | | | | |
| All | (30) | * | (24) | (26) | 45 |
| Desired > Actual | (28) | * | (22) | (26) | (46) |
| Desired = Actual | * | * | * | * | * |
| Desired < Actual | * | * | * | * | * |

Source: 1974 KNFS, Table 5.3.2

In the youngest age, current use is least among those whose fertility has already exceeded the desired size, suggesting that low use itself may account for the excess occurring so early in life.

For investigating the differentials by background characteristics in the level of inconsistency between fertility preference and contraceptive behavior, the level of current use of efficient methods, including sterilization is examined among the 1,246 women who are exposed and want no more children (Who comprise about 22 per cent of all ever-married women in the sample). Forty-four per cent of the exposed women who want no more children are currently using. Or, more to the point, more than half (56%) are not currently using and efficient method in spite of the fact that they want no more children and are exposed.

The relevant data on differentials are shown in Table 31. There is generally very little difference across categories of the several background characteristics examined. The only exception is education. The college-educated show the lowest rate of non-use, or conversely the highest rate of use. The differences are minor and inconsistent among the other education categories, especially when examined within age groups.

Except for the college-educated, in nearly all other categories of women, the majority are not using an efficient contraceptive methods in spite of their exposure and stated desired not to have any more children. Among those under 25, the non-use rate is as high as 77 per cent overall and nearly as high (or even higher) in most categories of background characteristics.

Since the proportion exposed and who want no more children is a function of age, the relative isze of the group of women in need of family planning is perhaps better measured by the proportion of all currently married women who do not want any more children but are not currently using an efficient contraceptive method though exposed, as shown in Table 32. There, we see that about a third (32%) of all currently married women in the ages 15-49 fall into this category. The proportion of such women is low among the younges (13%) and the oldest (17%), as might be expected, and highest in the 35-44 age group (42%), followed by the 25-34 age group (32%). Differentials in this proportion by background characteristics are small. Within each age group, the proportion of women in this category is fairly constant across background characteristics. The exceptions are the high school and college educated in the ages 25-34 and the Catholics in the ages 35-44. The proportions are somewhat lower for the better educated (26-27%) but substantially higher for the Catholics (50%).

These findings suggest that the family planning programme in Korea has a fairly clear-cut target group of substantial size to reach. About a third to two-fifths of all currently married women in the ages 25-44 regardless of background characteristics constitute that target. Further studies are needed to discover the reasons why these women who do not want any more children and exposed are not using any efficient contraceptive methods.

The relationship between fertility preferences and contraceptive use, focussing on the inconsistencies that exist for a sizeable number of women could be summarized as following:

a. Current contraceptive use is considerably more frequent among those whose actual family size has reached or exceeded their desired size in every age group except for those under 25. In the youngest ages, current use is least for those whose fertility exceeds their desired size, suggesting that low use itself may be responsible for the exceess occurring so early in life.

b. More than half (56%) of the exposed women who want no more children (comprising about 23 per cent of all ever-married women in the sample) were not currently using an efficient contraceptive method. Except for the college-educated, among whom more than half are current users, in nearly all other categories of women

the majority were not using an efficient method in spite of their exposure and stated desired not to have any more children. These women presumably constitute an important target group for Korea's family planning programme.

c. The relative size of the group of women who might be given special attention in the family planning programme because of their obvious need for family is measured by the proportion of all currently married women who state that they do not want any more children but are not currently using an efficient contraceptive method though exposed. About a third of all currently married women in the ages 15-49 fall into this category. By age, there are more of them in the ages 25-34 (33%) and 35-34 (42) and fewer fo them in the ages under 25 (13%) and 45 and over (17%). There is very little difference by background characteristics except for the high school and college-educated in the ages 25-34, among whom the proportions are somewhat lower and the Catholics in the ages 34-44, among whom the proportion is quite high (50%).

TABLE 31. PERCENTAGE OF EXPOSED WOMEN WANTING NO MORE CHILDREN WHO ARE NOT CURRENTLY USING AN EFFICIENT METHOD OF CONTRACEPTION, BY BACKGROUND CHARACTERISTICS AND AGE

| Background characteristics | All ages | Age | | | |
|---|---|---|---|---|---|
| | | Less than 25 | 25-34 | 35-44 | 45+ |
| All | 56 | 77 | 57 | 54 | 59 |
| Level of education: | | | | | |
| No schooling | 60 | * | 60 | 59 | 67 |
| Primary | 56 | 78 | 57 | 54 | 57 |
| Middle | 57 | 77 | 59 | 45 | * |
| High | 53 | * | 50 | 53 | * |
| College | 47 | - | (54) | (41) | * |
| Type of place of residence: | | | | | |
| City | 56 | 79 | 54 | 52 | 66 |
| Town | 56 | * | 58 | 50 | * |
| Village | 59 | (71) | 63 | 57 | 53 |
| Religion: | | | | | |
| No religion | 58 | 76 | 57 | 56 | 58 |
| Buddhist | 55 | (80) | 56 | 52 | (60) |
| Protestant | 54 | * | 57 | 47 | * |
| Catholic | 53 | * | (51) | 57 | * |

Source: 1974 KNFS, Tables 5.2.4A

TABLE 32. PERCENTAGE OF ALL CURRENTLY MARRIED WOMEN WHO DO NOT WANT ANY MORE CHILDREN BUT ARE NOT CURRENTLY USING AN EFFICIENT CONTRACEPTIVE METHODS THOUGH EXPOSED, BY BACKGROUND CHARACTERISTICS AND GE

| Background characteristics | Age | | | | |
|---|---|---|---|---|---|
| | All ages | Less than 25 | 25-34 | 35-44 | 45 or more |
| All women | 32 | 13 | 33 | 42 | 17 |
| Education: | | | | | |
| No schooling | 35 | * | 38 | 44 | 16 |
| Primary | 33 | 12 | 34 | 42 | 18 |
| Middle | 30 | 15 | 34 | 37 | * |
| High | 28 | 14 | 26 | 42 | 17 |
| College | 27 | * | 27 | (36) | 18 |
| Type of place of residence: | | | | | |
| City | 32 | 16 | 32 | 41 | 19 |
| Town | 29 | (15) | 30 | 38 | 13 |
| Village | 33 | 9 | 35 | 44 | 16 |
| Religion: | | | | | |
| None | 30 | 13 | 32 | 43 | 17 |
| Buddhist | 32 | 16 | 34 | 40 | 15 |
| Protestant | 31 | 14 | 33 | 39 | 18 |
| Catholic | 32 | * | 28 | 50 | 19 |
| Other | 41 | * | 43 | (42) | * |

Source: 1974 KNFS, Tables 1.6.3A-C and 5.2.4B

## F. CONCLUDING REMARKS

With the accelerated pace of social and economic modernization in recent years in Korea, age at first marriage has risen for both men and women; very few persons are currently marrying before age 20. Increasing educational opportunities for young women, coupled with their greater integration into the labour force of the more modern sector, probably account for this alteration in the timing of marriage. Marriage is still nearly universal for women by age 30, however. Marital dissolution by divorce or separation is uncommon, and remarriage by women, fairly rare.

Fertility of Korean women has declined rapidly over the last decade due in part to the spread of birth control practice among all age groups and in both urban and rural areas. Later age at marriage has apparently hastened the tempo of early fertility, but average family size itself has declined since the mid-1960's. The pattern of decline in the age-specific fertility rates shows the effect of the rising age at marriage in the youngest age group and of the diffusion of voluntary control of fertility within marriage in the older age groups--in the ages 35 and over in particular. In spite of the substantial decline in every sector, however,

significant urban-rural differentials in fertility persist, as do those by education and husband's occupation.

Substantial decline in mortality was achieved in the early years following the Korean War, coinciding with the rapid urbanization and improvement in health care facilities that took place throughout the country. Infant mortality, often viewed as an indicator of the health status of a population, declined by at least 20 points (per 1,000 live births) 55 to 38 in the decade preceding the survey. Further decline in mortality may be expected with continued improvement in health care programmes and facilities and further rise in standard of living of the population as a whole.

The traditional large family size preference in Korea is rapidly becoming a thing of the past. Women under 30, who reached maturity during the years of intensive family planning programme activities and whose fertility behaviour is of greatest consequence for future rate of population growth, express a desire to have slightly less than three children on the average. Better education and urban residence are associated with smaller family size norms; the on-going process of social modernization in Korea may thus be expected to facilitiate the trend toward fewer desired number of

children. A marked preference for sons continues to exist, however, and is likely to exert an upward pressure on actual family size during the process of family formation.

Knowledge of contraception is nearly universal throughout the various segments of the population and use is quite widespread, as the great majority of currently married women state a desire for no more children. There are still significant differentials in contraceptive practice, however, by such background characteristics as place of residence, education, and husband's occupation. Induced abortion too continues to play an important role in the determination of fertility levels in Korea. It appears that abortion determination of fertility levels in Korea. It appears that abortion is used by many women not necessarily as an alternative to contraception but in a somewhat complimentary fashion. While sterilization is still not widespread, its potential place in Korea's family planning programme is suggested in the finding that nearly one-fourth of the women as young as 20-24 and over one-half of those in the ages 25-29 state a desire for no more children. Their acceptance of sterilization could have a substantial demographic impact.

There does not seem to be any particular segment of the population strongly resistent to contraception, but there is a sizeable

group of women in nearly all categories of background characteristics whose attitude about family size preference and contraceptive behaviour are conspicuously inconsistent. These are the women who, though professing no desire for more children and exposed to risk of further childbearing, are not using an efficient contraceptive method. This group constitutes about one-third of all currently married women. These results, together with the finding that about 70 per cent of all currently married women desire no more children, should help define an urgent task for the family planning programme: to enlist these women to take up efficient methods and to help them sustain their use in an effective manner to avoid unwanted childbearing.

It should be obvious from the above remarks, and indeed from the some discussion, that there is ample scope for further analysis of the data. Examination of the fundamental topic of fertility has been tentative at best. It is expected that more definitive estimates of current fertility, for example; would be made after the data are evaluated for their quality and adjustments made as needed. It is also expected that the application of more advanced analytical techniques will clarify the complex interaction among fertility, education, and residence and allow a fuller introduction

into the explanatory framework of such variables as the woman's pattern of work, which may prove to have an important bearing on fertility behaviour. Further, it should be noted that a considerable body of data concerning contraceptive behavior, lactation, and induced abortion have not yet been fully exploited. Detailed analyses of these data should permit a broader appraisal of the national family planning programme in Korea than has ever been attempted.