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An Overview Of Mortality In Korea

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I. BACKGROUND

1. General Demographic Characteristics:

The Republic of Korea is one of the most populated countries in the world. Population density has already reached a high level. According to the 1975 census, the total number of population was 34,680,000, and it is assumed that the total population reached approximately 38 million by the end of 1979. Population density was about 350 persons per square kilometre in 1975 and 365 persons per square kilometre in 1979. Consequently, Korea's population density ranks as one of the highest in the world, being only lower than Hong Kong, Singapore, Netherlands, Belgium and Monaco, whose population densities were over 300 persons per square kilometre.

In terms of the growth of population size, Korea's population has been steadily increasing. The first census was taken in 1925 and reported the number of population as 18,543,000. Censuses were repeated on 1 October of the years 1930, 1935 and 1940, and on 1 May in 1944. Table 1 shows the census and year-end populations from 1925 to 1944.

After the liberation of the country from the Japanese administration in 1945, Korean population was characterized by the repatriation of a large number of people from overseas and also the migration of a substantial number of refugees from the north into the south. The total number of people repatriated from overseas was approxi-

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Table 1. Census Population by Year, Whole Korea (1925-1944)

	Number	of Population (tl	nousands)	Population
Year	Total	Male	Female	Increase Rate (%)
1925	19,020	9,726	9, 294	1. 9
1930	20,438	10, 399	10,039	1.4
1935	22, 208	11,271	10,937	1.7
1940	23, 547	11,839	11,708	1.2
1944	25, 120	12,521	12,599	1.8

Source: Economic Planning Board, Republic of Korea, Korea Statistical Yearbook, 1978.

mately 2.3 million, and among them 1.8 million were believed to enter South Korea. The first population survey done by the United States Military Government in Korea in 1946 assessed the total population in South Korea at 19,369,000. The population census taken on 1 May 1949 represented virtually the first of its kind since the establishment of the Government of the Republic of Korea. According to the 1949 census, the population had increased to 20,167,000.

Besides the size of population growth due mainly to social migration, the course of population development in Korea was greatly influenced by political turmoil and

Table 2. Total Number of Population by Year, South Korea (1946-1978)

	Numb	er of Population	(thousands)	Population
Year	Total	Male	Female	Increase Rate(%
1946	19, 369	.—		-
1949	20, 167	10, 188	9,979	4.7
1955	21,502	10,753	10,749	1.0
1960	24, 954	12,525	12,429	3.0
1966	29, 160	14,684	16,476	2.5
1970	31,435	15,779	15,565	2.1
1975	34,679	17,445	17, 234	1.8
1976	35,860	18,063	17,797	1.6
1977	36,436	18, 360	18,076	1.6
1978	37, 019	18,659	18, 360	1.6

Source: Economic Planning Board, Republic of Korea, Korea Statistical Yearbook, 1978.

social unrest during and after the Korean war; in particular, the level of mortality increased during that time, whilst birth rates, in contrast, rose very sharply after the war. Hence, the 1955 census disclosed a total population of 21,502,000 with an unusually low rate of population increase, 1.1 percent annually during the intercensal period 1950-55. It increased as high as 3.2 percent of population growth rate for the 1955-60 period. Contributing to this rapid growth rate was the post Korean war "baby boom", as well as substantial mortality decline which was mainly due to an improved standard of living and communicable disease control through organized activities in preventive measures.

The high annual growth rate was taken as a warning by policymakers and economists as to the seriousness of population problems Korea was facing. Convinced that a high growth rate is a major obstacle to economic growth in Korea, the Government adopted a population control policy as a part of the comprehensive economic development plan in 1961. Since population policy in Korea evolved primarily in response to the problems caused by the high population growth rate, it has historically focused on the reduction of fertility through a family planning programme and other supporting activities.

After the inception of the population control policy in Korea, fertility has steadily declined and population growth rates dropped from 3.2 percent in 1960 to 1.6 percent in 1978. Needless to say, the most important contributing factor in this reduction is a remarkable decline in fertility resulting from the successful implementation of the national family planning programme. The other factors were a high prevalence of induced abortion, particularly in urban areas and the improvement of women's status and their active social participation. Although the population control programme in Korea was a success statistically, the country was nevertheless still faced with population problems in terms of density and the resource availability.

2. Public Health:

Health service is one of the important factors affecting demographic change in response to mortality. Although considerable progress has been made during the last two decades in the provision of medical and public health services, the level of health service per capita remains insufficient.

By 1978, the ratio of doctors and paramedical personnel to the total population was still unsatisfactory, with one doctor per 1,600 and one dentist per 12,000 of the population respectively.

The number of medical and paramedical persons as well as hospital beds are shown in Table 3

Table 3. Number of Medical & Paramedical Persons and Hospital Beds by Year

(): Ratio for Population

	1965	1968	1970	1972	1974	1976	1978
Doctor*	13, 703	16, 134	18, 184	20,437	18,460	20, 703	22, 931
	(2, 095)	(1, 911)	(1, 773)	(1,639)	(1,879)	(1, 732)	(1, 614
Dentist	1,762 (16,291)	1,963 (15,710)	2, 122 (15, 194)	2,544 (13,119)	2,422 (14, 324)	2,744 (13,069)	3, 102 (11, 934
Nurse	8,898 (3,226)	12,775 $(2,414)$	17,958 (1,795)	35,693 (939)	48, 697 (713)	64,920 (553)	30, 691 (459
Pharmacist	10,028	12,792	14,648	16,724	18,729	20,718	22, 372
	(2,862)	(2,411)	(2,201)	(2,003)	(1,852)	(1,731)	(1, 655
Herb doctor	2,849	2,894	3, 252	3, 446	2,738	2,855	2,852
	(10,075)	(10,565)	(9, 666)	(9, 723)	(12,671)	(12,560)	(12,980
Hospital beds	11,413	15,696	16,538	16, 373	19,062	22, 792	28, 869
	(2,515)	(1,965)	(1,901)	(2, 046)	(1,820)	(1, 573)	(1, 272

Source: Economic Planning Board, Socio-economic Indicators of Korea, 1978, pp. 126-127.

In Korea, as in most developing countries, attention should be given to the fair distribution of medical and health facilities between urban and rural areas. For example, as of 1976, more than 40 percent of the hospitals and clinics are concentrated in Seoul, particularly private clinics practising in the urban area. Hence, the lack of medical care in the rural and mountainous areas is critical.

II. MORTALITY TRENDS IN KOREA

I. General Trends in Mortality:

Through demographic transition in most developing societies, mortality has, in fact played a key role in accelerating the population growth. The theory so called: "The demographic transition theory" explains that rapidly increased population growth

^{*} Including herb doctor.

rates have been the product of decreased death rates, while fertility levels remained relatively high. For example, a sharp decline in mortality since the end of the Korean war has contributed to a population growth rate of about 2.1 percent a year (Cho, 1973)¹⁾. In this connextion it is important to note that facts about mortality should be well documented and better understood, along with the factors in the decline of fertility.

However, since the Korean Government adopted the population control policy in 1961, much more attention has been given to studies on fertility, rather than studies on mortality. Much more complex and much less understood are the facts that account for changes in mortality. Changes in mortality certainly have been much attributed to the socioeconomic development in Korea. To explain changes in Korean mortality rates, accordingly, consideration must be given to societal indicators of social, economic and public health situations at micro and macro levels in Korea.

The data on mortality trends in Korea can be obtained from:

- (1) the Vital Registration System;
- (2) the census data; and
- (3) the survey data.

Although the government made efforts to improve the vital registration system, the official vital registration statistics suffer from under-registration. It is assumed that the under-registration of deaths might be highest for children, especially for those aged under 1 year. Hence, estimates of both births and deaths have to be derived

Table 4. Trends of Crude Death Rates on the Basis of Government Registration Data, 1911-1966

	Year	Number Population (thousands)	Number Deaths Reported	Death Rate (0/00)
All Korea	1911	13,832	163, 253	11. 8
	1912	14, 567	232, 115	15. 9
	1913	$\overline{15}, \overline{170}$	273, 235	18. 0
	1914	15,621	301,649	19. 3
	1915	15, 958	236, 936	21. 1
	1916	16,310	363, 556	22, 3
	1917	16,617	402,410	24.2
	1918	16,697	515, 243	30. 9
	1919	16,784	384, 505	22, 9
	1920	16, 916	394, 986	23.4

¹⁾ Cho, Lee-Jay, The Demographic Situation in Republic of Korea, East-West Center, Honolulu, Hawaii, 1973, p. 33.

Table 4. Continued

	Year	Number Population (thousands)	Number Deaths Reported	Death Rate (0/00)
	1921	17, 059	337, 934	19. 8
	1922	17, 208	268, 988	21. 4
	1923	17, 447	359, 358	20. 6
	1924	17, 620	378, 779	21. 5
	1925	18, 543	384, 673	20. 8
	1926	18, 615	380, 361	20. 4
	1927	18, 631	402, 840	21. 6
	1928	18, 667	424, 642	22. 8
	1929	18, 784	452, 853	24. 1
	1930	19, 686	373, 722	19. 0
	1931	19,710	401, 548	20. 4
	1932	20,037	448, 523	22. 4
	1933	20,206	392, 668	19. 4
	1934	20,514	398, 482	19. 4
	1935	21,249	421, 444	19. 8
	1936	21, 374	424, 063	19. 8
	1937	21, 683	386, 733	17. 8
	1938	21, 951	384, 179	17. 5
	1939	22, 098	414, 199	18. 7
	1940	22, 955	412, 048	18. 0
	1941 1942 1943 1944 1945	23, 913 24, 106 24, 390 25, 120	400, 953 452, 670 492, 031 523, 641	16. 8 18. 8 20. 2 20. 8
South Korea	1946 1947 1948 1949 1950	19, 369 19, 836 20, 027 20, 167	173, 453 178, 506 186, 794 —	11. 9 9. 0 9. 3 —
	1951 1952 1953 1954 1955	21, 027 21, 248 21, 502	125, 803 190, 638 147, 522	6. 0 9. 0 6. 9
	1956	22, 307	168, 943	7. 6
	1957	22, 949	151, 954	6. 6
	1958	23, 611	146, 634	6. 2
	1959	24, 291	177, 141	7. 3
	1960	24, 989	168, 657	6. 7
	1961 1962 1963 1964 1965 1966	25, 731 26, 470 27, 226 27, 633 28, 420 29, 195	579, 846 255, 753 245, 479 142, 572 168, 445 176, 850	9.7 9.1 5.2 5.9 6.1

Source: Economic Planning Board, Vital Registration Report, 1966.

from census and survey data.

A summary measure of the death level of all ages of the population is provided by the crude death rate, defined as the number of deaths in a year per 1,000 mid-year population. The trends in the mortality level based on government registration for the period 1910-1966 are shown in Table 4. Even though the age structure in Korea has changed, the crude death rate does provide an impression of the changes in mortality between the overall period before 1944 and after 1945. It will be observed that there is a lot of fluctuation in the rates from year to year. The increase or decrease in the death rate from year to year does not imply that the level of mortality actually changed during the given year. It is mainly due to the nature of vital registration; therefore, not much attention need be paid to the annual variation.

In Table 5, the incomplete and inadequate nature of mortality statistics is shown in a comparison between registered rates and estimated rates.

Table 5. Comparison of Registered and Estimated Death Rates, 1910-1965

	Death	Rate	C. 1.
Year	Registered rate	Estimated rate	Completeness of Death Registration(%)
1910–1915	15.7	33. 7	46.6
1916-1920	24.7	31.6	78.2
1921-1925	20.8	29. 5	70.5
1926-1930	21.6	26.4	81.8
1931–1935	20.3	23.3	87.1
1936-1940	18.4	21.4	86.0
1941-1945	19.2	19. 5	98. 5
1946-1950	10.1	15.8	63.9
1951–1955	7.3	14.3	51.0
1956-1960	6.9	12.8	53.9
1961-1965	7.5	10.5	71.4

Source: Choe, E.H., Problems and Adequacy of Vital Statistics in Korea, The Population Studies Center, Seoul National University, 1967, p. 33.

It has, however, to be noted that the estimated rates of mortality are also subject to a certain degree of deviation from the actual rates

Recently Coal and others²⁾ estimated mortality from registered deaths adjusted for under-registration. A simple modification of forward projection technique was applied to the deaths registered from 1971 to 1975 to estimate the completeness of registration: the result implies that 79 percent of male deaths and 69 percent of female deaths are registered.

2. Estimation of Mortality Level from Census and Survey Data

Since the degree of completeness and adequacy in the vital registration of deaths in Korea is not reliable, estimates of mortality must come from census or survey

Table 6. Estimates of Mortality Rates, 1910-1970

		Crude Death Rate	e Estimated From
	Year	Census data	Other data
All Korea	1910–1915	33.7	37.6
	1916-1920	31.6	34.4
	1921-1925	29.5	32.2
	1926-1930	26.4	30.3
	1931-1935	23.3	26.5
* **	1936-1940	21.4	21.3
	1941-1944	19.5	19.3
South Korea	1945-1950	15.8	23.0
	1951–1955	14.3	33.0
	1956-1960	13.0	16.3
	1961-1965	10.0	10.9
	1966-1970	9.5	9.5

Source: 1. Economic Planning Board, A Comprehenisve Study on 1966 Census, BOS, Economic Planning Board, 1970.

2. Ishi, Y., An Analysis of Population Growth in Korea, Tokyo, 1972.

3. Kwon, T.H., Population Change and Its Components in Korea, 1925-1966, Seoul National University, 1972.

4. Cho, L.J., Korean Population: Recent Trends and Future Perspectives, Paper Presented at a meeting of the International Liaison Committee for Research on Korea, Daejeon, Korea, 1972.

Coal, Ansley, Lee-Jay Cho and Noreen Goldman, Estimation of Recent Trneds, in Fertility and Mortality in the Republic of Korea, National Academy of Sciences, Washington D. C., 1980.

data. First of all, from the census data we can obtain estimates of the level of mortality. Using the age structure derived from the two censuses, we can estimate the survival probabilities for each age group during the five year period to determine the parameters for an abridged life table. Some studies on estimated mortality rates are presented in Table 6.

It will be observed that there was a substantial decline in mortality during the last 30 years. Furthermore, the census data show that mortality has been greatly improved in the years after 1945. However, the mortality situation during the years 1951-1955 is quite contradictory between the level derived from census data and the level estimated from other data. An estimate from cesus data showed a mortality rate of 14.3 for the period 1951-1955 as against a rate of 33.0 estimated from other data sources. The substantially high mortality during 1951-1955 is very likely due to the direct casualities and economic hardship during the Korean war.

In general, the long term trend in the mortality rate has been a steady decline from approximately 30 per thousand in the early 1930's to about 9 per thousand in 1970. This could largely be explained by the improvement in socio-economic status, better services in medical care and the development of environmental sanitation.

3. Mortality by Age and Sex

To allow for changing population patterns, the mortality by sex and age should be examined over a long period of time. Table 7 shows the age-specific death rates by sex for five different periods of time. It may be found that there are somewhat varied characteristics of death accroding to different ages and sex. The data presented shows that there has been a fall in the infant mortality rate over 40 years, 68 per thousand to 53 per thousand for males and 57 per thousand to 46 per thousand for females. For childhood ages 1-4, the fall has been more dramatic, from 43 to 4 for males and 38 to 3 for females, i. e. a 92 percent drop each.

The above table also demonstrates that there was a higher proportion of decline, in female mortality than in male mortality for the age group 45-69. In any event, it is generally accepted to say that male mortality is higher than female mortality for all ages through all the age groups.

A more concise way to summarize the mortality rates for all ages and sexes of

Table, 7. Age-specific Death Rates and Life Expectancy at Birth, All Korea, 1926-1942, and Republic of Korea, 1955-1971

A STATE OF THE PROPERTY OF T			Male			/0			Female			%
Age Group	1926-1930 (1)	1926-1930 1938-4219 1955-1960 (1)	1955-1960	1966	1971 (2)	Change (1)-(2)	1926–1930 (1)	1926-1930 1938-1942 1955-1960 (1)	1955–1960	1966	1971 (2)	Change (1)-(2)
Under 1	67.7	105.8	118.0	55.5	52.7	22.2	56.8	90.4	97.8	53.9	45.7	19.5
1-4	43.2	34.7	11.6	6.0	3.6	91.7	38.3	31.2	10.2	5.9	3.2	91.6
59	11.9	5.8	2.2	3.8	1.5	87.4	11.3	5.3	2.7	3.8	1.4	9.78
10-14	6.9	6.3	2.0	1.7	0.3	92.6	6.5	3.3	2.0	1.4	0.3	6.06
15–19	7.2	4.9	2.8	2.2	0.7	90.3	7.4	5.6	3.0	2.1	9.0	91.9
20-24	10.1	7.1	3.8	2.7	1.5	85.1	10.5	6.5	4.1	2.6	1.0	81.7
25–29	11.1	7.3	5.1	3.0	1.7	84.7	10.9	6.5	4.5	2.9	1.6	85.3
30-34	12.7	8.1	6.8	3.3	2.0	84.3	12.5	6.9	6.4	3.1	1.6	87.2
35–39	13.7	9.7	9.1	4.0	2.8	79.6	13.3	7.6	8.6	3.8	2.2	83.5
40-44	12.6	12.6	12.1	5.1	4.7	62.7	11.2	8.5	11.1	42.	3.5	61.3
45-49	14.5	16.0	16.0	5.8	7.3	49.7	11.9	8.9	14.0	4.5	5.7	52.1
50–54	19.6	21.2	21.2	15.9	13.0	33.7	15.2	12.2	17.2	5.0	10.2	32.9
55-59	26.9	28.0	29.9	31.6	19.5	27.5	20.4	17.4	23.2	14.7	14.3	29.9
60-64	44.0	38.5	41.7	35.1	30.8	30.0	33.6	26.5	33.6	17.1	20.9	37.8
62-69	60.9	58.5	60.1	50.2	41.2	32.3	47.6	42.4	40.5	30.5	28.0	41.2
	32.4	42.5	51.1	59.7	61.9		35.1	45.0	53.7	64.1	8.99	

Source: Cho, Lee Jay, The Demographic Situation in the Republic of Korea, Paper of the East-West Population Institute, no. 29, EWC, Honolulu, Hawaii, 1973, p.8.

population is to use the concept of expection of life at a birth, which almost doubled over the same period of time from 32.4 to 61.9 years for males and 35.1 to 66.8 years for females, giving an increase of 91 percent and 90 percent respectively. This could be explained by the remarkable improvement of mortality during any given period of time.

4. Infant Mortality Rate

The infant mortality rate is the most important single indicator to determine the changing pattern of health status and population trends in the country. Therefore, the infant mortality is the subject to explicit two disciplines, the first being the study of health in populations and the second the study of population. However, in Korea the degree of completeness and accuracy in the registration of deaths is low; the analysis of trends in the infant mortality is based on the estimates shown in Table 7.

As mentioned earlier, we observed that the infant mortality rate for males is higher than that for females during the same periods of time. For the period 1926-1930, the mortality rate per thousand live births was 68 for males and 57 for females. Then a tremendous increase of deaths between 1938 and 1942 occurred: 106 for males and 90 for females, (Lee, 1977). 3) This does not imply that mortality actually incr-

Table 8. Estimates of Infant Mortality from World Fertility Survey Data in Korea, 1964-1973

	Year	Rate	Year	Rate
1	.960-64	59	1969	53
1	.964	62	1970	57
1	1965	46	1971	43
1	.966	58	1972	38
1	.967	54	1973	33
1	.968	50		

Soure: Korean Institute for Family Planning, 1974 World Fertility Survey Report. 1977.

³⁾ Lee, D. W., Korean Mortality Measures and Related Problems, Journal of Population Studies Seoul, No. 17, 1973.

eased during the year. It is largely due to the more completeness of vital registration under the Japanese administration.

Estimates of infant mortality rates based on the pregnancy history records of the Word Fertility Survey Data in Korea is given in Table 8.

The estimates presented in the above table suggest that a declining trend over time in the risk of death during infancy is quite steady. It is obviously clear that the level of infant mortality rate in Korea has decreased significantly but the level itself is the subject to qualification because of some problems associated with inadequate registration of vital events.

III. CAUSES OF DEATH

The cause of death is an important variable in the chain of events leading to death. Unfortunately, however, reliable sources of information on causes of death are rarely available in Korea. The traditional sources of data on causes of death are civil registration of vital events, which are seriously unreliable. The problems of unreliable data on causes of death have been associated with a large under-registration of death and the reporting of the symptom of cause of death by unqualified persons (e.g., fever, convulsion, cessation of breathing, etc.).

Under these circumstances, surveys have developed as an alternative source of data. The retrospective surveys investigate deaths which occurred in a particular reference period. Experience has shown, however, that field surveys have some limitations: a) the information is restricted by the size of the sample; b) the information is subject to errors, largely due to omission in the declaration of deaths; and c) the information given is subject to errors regarding the time of death when a retrospective reference period is used.

Despite inaccuracy of comparison, an overview of changes in the pattern of causes of death may be obtained. Table 9 shows the ten leading causes of death reported by various studies.

The pattern of leading causes of death has changed in the past decades. Before 1945, the leading causes of death are illness-related to the respiratory system, the

Table 9. Ten Major Causes of Death by Year

Ordinal Numb	1920*	1930¹	1935¹
1	Communicable Disease	Communicable Disease	Communicable Disease
2	Disease of Digestive System	Disease of Digestive System	Disease of Digestive System
3	Disease of Respiratory System	Disease of Respiratory System	Disease of Respiratory System
4	Disease of Circulatory System	Disease of Circulatory System	Disease of Circulatory System
5	Senility	Senility	Senility
6	Urinary Disease	Urinary Disease	Urinary Disease
7	Influenza	Influenza	Influenza
8	Disease of Nervous System	Neurological Disease	Neurological Disease
9	Disease of Entire Body	Disease of Entire Body	Disease of Entire Body
10	Beriberi	Skin Disease	Causes Unknown

Table 9. Continued

Ordina Num		1959–1960³	1974³
1	Communicable Disease	Disease of Digestive	Disease of Digestive
2	Disease of Digestive System	Disease of Respiratory System	Disease of Respiratory System
3	Disease of Respiratory System	Disease of Circulatory System	Disease of Circulatory System
4	Disease of Circulatory System	Disease of Nervous System	Disease of Genito-urinary System
5	Genito-urinary Disease	Infective and Parasitic Disease	Infectiv and Parasitic Disease
6	Tuberculosis	Complication of Pregnancy and Child birth	Congenital Anomalies
7	Neurological Disease	Certain causes of Perinatal Mortality	Certain causes of Perinatal Mortality
8 ,	Malignant Neoplasm and Malnutrition	Neoplasm	Neoplasm
9	Exogenous Causes	Symptoms and ill-defined conditions	Symptoms and ill-defined conditions
10	Causes Unknown	Accidents, Poisoning and Violence	Accidents, Poisoning and Violence

^{1.} Statistical Yearbook of Governmental-General of Chosen, 1920-1935.

^{2.} Park, C.B., Statistical Observation on Death Rates and Causes of Death for Koreans, Statistical Information, Economic Planning Board, 3:6-7, 1961.

^{3.} Lee, J.S., Study on Trends of Causes of Death in Hospital: Based on Death Certificate of SNU Hospital, Korean Journal of Public Health, 12.2, 1975.

digestive system and communicable diseases, including smallpox, pneumonia, tuberculosis, etc. The comparable pattern of causes of death after 1945 is a rise in deaths from neoplasm and accidents, poisoning and violence. According to a recent case study⁴⁹ on major causes of death in hospitals, deaths from disease of the circulatory system such as heart trouble and hypertension, both of which are more common in later life, come to our attention increasingly often. However, mortality due to malnutrition, pneumonia, typhus and diptheria have been almost completely brought under control. Deaths from tuberculosis did not decline significantly as compared to other communicable diseases.

Apparently, cause of death is affected by the variation in the age of population. An overview of the differential pattern in cause of death by age can be seen from Table 10.

The three leading causes of death for children under age 5 in 1966 are disease of respiratory system, infections and parasitic disease and symptoms, senility and ill-defined conditions. These three causes account for nearly 80 percent among and females, presenting 78.7 percent and 79.5 percent respectively. The most prominent cause of death is disease related to the respiratory system, which comprises 37.9 percent and 38.6 percent for males and females respectively of all deaths in this age group. The general pattern in leading causes of death between age groups under 5 years and 5-19 years is more or less the same, except deaths from disease of the respiratory system in the age group 5-19 years which is proportionately lower than age under 5 years. However, there is an increasing tendency in deaths from disease of digestive system, which accounts for 13 or 15 percent of the total deaths.

There are substantial changes in pattern in subsequent age groups 20-49 years and 50 years and over. In age group 20-49, deaths from disease of the respiratory system have declined remarkably from 28 or 30 percent to about 10 percent. In age group 50 and over, deaths from symptoms, senility and ill-defined condition became the first leading cause of death. Furthermore, deaths from nervous system and sense organ have increased significantly from about 9 percent to 15.5 percent. One of the notable figures is that mortality from symptom, senility and ill-defined symptoms was quite dominant throughout all ages of both sexes, which have accounted for 20 percent or more in each age group of under 50 years and almost 40 percent in age

⁴⁾ Lee, J.S., op. cit.

Table 10. Distribution of Deaths According to Cause by Age and Sex, 19662

	-					(per th	(per thousand)	
		Males	es			Females	ales	
Cause of death	Under 5	5–19	20-49	50 & over	Under 5	5-19	20-49	50 & over
Infective and parasitic diseases	215	169	164	52	232	202	149	34
Neoplasms	4	15	09	61	7	15	71	48
Allergic endocrine system, metabolic and nutritional diseases	18	10	12	36	18	6	10	41
Diseases of blood and blood-forming organs	Н	2	H	2	- -	П	4	4
Mental, psychoneurotic system and personality disorders		4	6	14	Ħ	· ED	12	16
Diseases of nervous system and sense organs	09	1.1	94	156	22	92	91	151
Diseases of circulatory system	10	22	34	52	10	20	40	55
Disease of respiratory system	379	275	86	74	386	304	113	75
Disease of digestive system	86	147	194	158	87	133	202	132
Diseases of genito-urinary system	4	11	П	13	2	10	18	15
Deliveries and complications of pregnancy, childbirth and puerperium	1	ı	1	ţ 	1	П	36	83
Diseases of skin and cellular tissue	Н	0	0	0	0	0	. 1	0
Disease of bones and organs of movement	H	4	2	က	-	22	Ω	4
Congenital malformations	0	1	1	0	I	I		ŀ
Certain diseases of early infancy	0	1	1		0	I	l	/ F
Symptoms senility, and ill-defined conditions	193	196	216	367	177	185	202	416
Alternative classification of accidents, poisoning and violence	27	73	100	12	19	46	42	-
Total	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Source: Economic and Social Commission for Asia and the Pacific, Population of the Republic of Korea, ESCAP/UN, Bangkok, Thailand, 1975, p. 181.

2) Figure computed from the data in the 1966 Vital Statistics.

50 and over.

In short, the importance of mortality information from both public health and demographic points of view must be studied and understood in detail. In particular, each individual cause of death should be analyzed with the aims of increasing the duration of human life through preventive measures and predicting demographic impact on population growth in the future.

W. CONCLUSION

Needless to say, the area of mortality study is one of high priority in demographic studies as a basic component estimating population growth and structure change, as well as in its relation to the major implementation of the public health programme. The mortality rate in Korea has been gradually declining since 1960 along with the improvements in socio-economic status and the large expansion of health and medical care services. It was claimed, on the basis of the 1975 census, that the level of mortality rate in Korea remains at around 7 per thousand, having declined tremendously from about 14 per thousand in the early 1960's. On the other hand, there are wide disagreements among demographers in Korea about the level of mortality. For example, the government estimate of the crude death rate for 1970 was 8 per thousand, while one estimate from the census was 12 or 13 thousand. Under these circumstances, advantage should be taken of any possible methods of data collection and appropriate and feasible methods should be used to meet the needs of mortality questions in the country.

It should be noted that from now on the mortality rate is hardly expected to decline as drastically as the trend seen in the last several decades; and since the quality of mortality data is not uniform in Korea, further attention will be needed to the question of mortality trends and prospectives. There are considerable differences in the background of mortality: by age and other demographic characteristics, socio-economic differences, geographical variation, and causes of death. Meanwhile, the research

⁵⁾ Kown, T.H. and others, *The Population of Korea*, The Population and Development Studies Center, Seoul National University, 1975, p.25.

answers to each of these question need to be developed further in the future at the national level.

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