

*With the Compliments
of*

SEAMIC

Japan

SEAMIC HEALTH STATISTICS

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Preface

Because statistics are indispensable in the planning and evaluation of any societal program, it goes without saying that they are of great importance in developing programs in the health and medical field. Thus, since the inception of the International Medical Foundation of Japan, efforts have been made, through its SEAMIC activities, to collect facts and figures relevant to health and medical care in the countries concerned and to compile secondary statistics and other reference materials.

This publication is the result of collaborative efforts among our partners in the SEAMIC-participating countries. It is our hope that the SEAMIC HEALTH STATISTICS (SHS), as small a publication as it is, may, with its more updated, improved, and enlarged contents, serve as a *vade mecum* for all people engaged in or concerned with health planning in the Southeast Asian region.

As in the previous edition, Part III have been compiled by the SEAMIC Committee on Infectious Diseases (Coordinator: Dr. Makoto Ohashi) with the cooperation of their overseas partners.

March, 1988

Shigeru Takabayashi
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EXPLANATION OF SYMBOLS

..		Category not applicable
(blank)		Data not available
—		Nil
0 0.0		Not nil, but less than half of the unit employed
*		Provisional or estimated

Part I

HEALTH STATISTICS

1-1 Population by Sex, Rate of Population Increase, Surface Area and Density

	Latest Census						Mid-year Estimates 1986 (in thousands)	Annual Rate of Increase 1976~86 (%)	Surface area 1986 (km ²)	Density 1986 (Person/km ²)
	Date	Total	Male	Female	Sex Ratio	Persons Per household				
INDONESIA ⁽¹⁾	31 Oct. 1980	146,776,473	72,951,670	73,824,803	98.8	4.9 ⁽²⁾	163,366 ^(2) a)	2.2 ^(3) b)	1,919,413	86 ⁽²⁾
JAPAN ⁽⁴⁾	1 Oct. 1985	121,047,196	59,495,663	61,551,533	96.7	3.2	121,492 ⁽⁵⁾	0.7	372,313	326
MALAYSIA ⁽⁶⁾	10 June 1980	13,745,241	6,918,370	6,826,871	101.3	5.4	16,109 ⁽⁷⁾	2.3	329,757	49
Peninsular Malaysia		11,426,613	5,731,116	5,695,497	100.6	5.3	13,324 ⁽⁷⁾	2.2	131,598	101
Sabah		1,011,046	528,255	482,791	109.4	5.5	1,271 ⁽⁷⁾	3.8	73,710	17
Sarawak		1,307,582	658,999	648,583	101.6	5.7	1,514 ⁽⁷⁾	2.4	124,449	12
PHILIPPINES ⁽⁸⁾	1 May 1980	48,098,460	24,128,755	23,969,705	100.7	5.6	56,004	2.5	300,000	187
SINGAPORE ⁽⁹⁾	24 June 1980	2,413,945	1,231,760	1,182,185	104.2	4.7	2,586	1.2	622	4,158
THAILAND ⁽¹⁰⁾	1 April 1980	44,824,540	22,328,607	22,495,933	99.2	5.2	50,396 ^{a)}	2.1	513,000	98

Source: (1) - *Population of Indonesia*, Central Bureau of Statistics
(2) *Population Projection 1980-2000 Indonesia*, Central Bureau of Statistics
(3) *Statistical Yearbook of Indonesia 1986*, Central Bureau of Statistics
(4) *Japan Statistical Yearbook 1987*, Statistics Bureau
Management and Coordination Agency, 1987
(5) *Monthly Statistics of Japan*, October 1987, Statistics Bureau,
Management and Coordination Agency
(6) *General Report of the Population Census 1980*, Vol.1,
Department of Statistics, Ministry of Health

(7) *Current Population Estimates 1986*, Department of Statistics
(8) National Statistics Office, Manila
(9) *Census of Population 1980 Singapore, Yearbook of Statistics*,
Singapore 1986, Department of Statistics,
(10) *1980 Population and Housing Census*, National Statistics Office,
Office of the Prime Minister

Note: a) For 1985
b) Annual Rate of Increase 1980-1985

1-2 Estimates of Mid-year Population

(in millions)

	1970	1975	1980	1982	1983	1984	1985	1986
INDONESIA ⁽¹⁾	119.47	130.50	146.36	152.99	156.37	159.83	163.37	166.91
JAPAN ⁽²⁾	104.34	111.57	116.78	118.45	119.26	120.02	120.75	121.49
MALAYSIA	10.39	11.90	13.74 ⁽³⁾	14.45 ⁽⁴⁾	14.80 ⁽⁴⁾	15.10 ⁽⁴⁾	15.7 ⁽⁵⁾	16.11 ⁽⁵⁾
PHILIPPINES ⁽⁵⁾	36.68	42.07	48.32	50.78	52.06	53.35	54.67	56.00
SINGAPORE	2.07	2.26	2.41	2.47	2.50	2.53 ⁽⁷⁾	2.56 ⁽⁷⁾	2.59 ⁽⁷⁾
THAILAND	36.37	41.87	46.50	48.56	49.46 ^(8) a)	50.40 ^(8) a)	51.68 ^(8) a)	52.65 ^(8) a)

Source: Monthly Bulletin of Statistics, September 1983, UN

- (1) Indonesian Population Projection 1980-2000, Central Bureau of Statistics
- (2) Vital Statistics 1986 Japan, Ministry of Health and Welfare
- (3) General Report of the Population Census 1980, Vol. 1, Department of Statistics, Ministry of Health
- (4) Population Estimates Computed by Information and Documentation System Unit, Planning and Development Division, Ministry of Health, Based on the 1980 Population Census

- (5) Current Population Estimates 1986, Department of Statistics
 - (6) National Statistics Office
 - (7) Yearbook of Statistics Singapore 1985/86, Department of Statistics
 - (8) Report of Working Group on Population Projections, Office of the National Economic and Social Development Board
- Note: a) Estimates based on total population figures, 1980 Population & Housing Census, National Statistical Office

1-3 Population Projection

(in thousands)

	1990	1995	2000	2005	2010	2015	2020	2025	2030	2035
INDONESIA ⁽¹⁾	183,457	202,746	222,753	248,897	276,153	306,394	339,946	384,273		
JAPAN ^(2)a)	124,225	127,565	131,192	131,247	135,823	135,938	135,304	134,642	134,067	133,133
MALAYSIA ⁽³⁾	17,444	19,748	22,454							
PHILIPPINES ^{b)}	61,480	68,424	75,224	81,591	87,206	92,430	97,682	102,686	107,123	
SINGAPORE ⁽⁴⁾	2,711	2,837	2,930							
THAILAND ⁽⁵⁾	56,340	60,506	64,389	67,910	70,865	73,208				

Source: (1) Based on Population Projection, Central Bureau of Statistics Indonesia, Calculated by Centre for Health Data
 (2) *Future Population for Japan, Provisionally Prepared in December 1986*, Institute of Population Problems, Ministry of Health and Welfare
 (3) Information and Documentation System Unit, Planning and Development Division, Ministry of Health
 (4) *Demographic Trends in Singapore* (Census Monograph No. 1), Department of Statistics

(5) *Report of Working Group on Population Projections*, Office of the National Economic and Social Development Board, 1985
Note: a) Population as of October 1 of the year stated
 b) Based on Population Projections (Series 2: Moderate Fertility Decline and Moderate Mortality Decline), National Statistics Office

1-4 Population by Age and Sex

	Year	Sex	Age								
			All Ages	0	1-4	5-9	10-14	15-19	20-24	25-29	30-34
INDONESIA ⁽¹⁾	1986	T	168,726.5	23,804.0		21,957.5	19,907.5	17,709.3	15,535.5	13,969.8	11,602.6
		M	84,017.5	12,067.9		11,197.2	10,117.0	8,942.2	7,792.7	6,960.1	5,744.7
		F	84,709.0	11,736.1		10,760.3	9,790.5	8,767.1	7,742.8	7,009.7	5,857.9
JAPAN ^(2)a)	1986	T	121,672	7,314		8,218	9,902	9,511	8,096	7,766	8,625
		M	59,805	3,747		4,212	5,076	4,877	4,118	3,923	4,345
		F	61,867	3,567		4,006	4,826	4,634	3,979	3,844	4,280
MALAYSIA ⁽³⁾	1986	T	16,108.7	2,318.8		1,919.2	1,847.8	1,717.3	1,615.2	1,379.6	1,167.7
		M	8,116.4	1,193.9		948.5	944.8	876.7	807.2	669.9	574.9
		F	7,992.2	1,124.9		935.1	903.8	840.6	808.1	709.1	592.8
PHILIPPINES ⁽⁴⁾	1986	T	56,004.1	1,690.3	6,371.1	7,608.0	6,742.6	6,046.8	5,346.0	4,666.5	3,956.3
		M	28,112.4	866.0	3,256.8	3,888.9	3,467.3	3,095.4	2,629.0	2,240.9	1,952.3
		F	27,891.7	824.2	3,114.3	3,719.1	3,275.3	2,951.3	2,717.0	2,425.6	2,004.0
SINGAPORE ⁽⁵⁾	1986	T	2,586.2	41.3	165.6	194.0	218.0	227.8	278.6	298.9	262.2
		M	1,316.9	21.5	86.1	100.9	112.8	117.0	143.0	154.4	133.7
		F	1,269.3	19.8	79.5	93.1	105.2	110.8	135.6	144.5	128.5
THAILAND ⁽⁶⁾	1986	T	52,654	6,417		6,289	6,190	6,090	5,441	4,635	3,853
		M	26,369	3,253		3,187	3,152	3,105	2,762	2,327	1,922
		F	26,285	3,164		3,102	3,038	2,985	2,679	2,308	1,931

Source: (1) *Statistical Profile of Mothers and Children in Indonesia 1986*, Central Bureau of Statistics

(2) *Japan Statistical Yearbook 1987*, Statistics Bureau, Management and Coordination Agency

(3) *Current Population Estimates 1986*, Department of Statistics

(4) National Statistics Office

(5) Department of Statistics

(6) *Report of Working Group on Population Projections*, Office of the National Economic and Social Development Board, 1985

Note: a) Population Estimates as of 1st October 1986

(in thousands)

Age											
35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	
8,967.6	8,017.3	7,342.0	6,128.5	4,764.1	3,379.9	2,404.3	1,666.8		1,569.0		
4,415.3	3,913.8	3,547.9	2,927.5	2,248.9	1,574.3	1,104.2	754.9		708.9		
4,552.3	4,103.5	3,794.1	3,201.0	2,515.2	1,805.6	1,300.1	911.9		860.9		
11,315	8,684	8,401	8,066	7,171	5,731	4,282	3,635	2,639	1,460	854	
5,690	4,332	4,174	3,995	3,505	2,590	1,798	1,529	1,067	511	277	
5,625	4,352	4,227	4,073	3,666	3,141	2,484	2,106	1,572	908	578	
946.9	701.7	645.9	502.1	421.6	313.9	256.6	157.4	113.9		83.0	
477.6	360.0	330.3	248.4	207.0	152.4	122.5	75.6	54.0		37.4	
469.1	341.7	315.6	253.6	214.6	161.5	134.0	81.6	59.9		45.6	
3,110.4	2,451.9	2,078.0	1,655.6	1,341.0	1,029.3	794.1	586.6	323.8	147.7	68.1	
1,566.8	1,242.6	1,043.7	818.2	653.5	488.7	375.6	275.7	151.8	69.8	29.4	
1,533.6	1,209.3	1,034.3	837.4	687.5	540.6	418.5	310.9	172.0	77.9	38.7	
225.2	134.1	135.6	107.4	92.0	67.5	54.2	40.6	26.3	11.9	5.0	
114.2	68.1	68.1	54.1	46.9	34.3	26.2	18.4	11.4	4.5	1.3	
111.0	66.0	67.5	53.3	45.1	33.2	28.0	22.2	14.9	7.4	3.7	
2,997	2,377	2,114	1,815	1,453	1,083	777	551		572		
1,503	1,190	1,035	875	699	519	362	250		228		
1,494	1,187	1,079	940	754	564	415	301		344		

1-5 Urban and Total Population

(in thousands)

	1960			1970			1980			1985		
	Total	Urban	(%)	Total	Urban	(%)	Total	Urban	(%)	Total	Urban	(%)
INDONESIA ⁽¹⁾	97,085 ^{a)}	14,358 ^{a)}	14.8 ^{a)}	119,143	20,733	17.4	146,776	32,846	22.4	164,046 ⁽²⁾	43,020 ⁽²⁾	26.2 ⁽²⁾
JAPAN ⁽³⁾	94,300	59,698	63.3	104,666	75,429	72.1	117,060	89,187	76.2			
MALAYSIA ⁽⁴⁾	8,170	2,060	25.2	10,439	2,787	26.7	13,745	4,687	34.1			
Peninsular Malaysia				8,810	2,530	28.7	11,426	4,250	37.2			
Sabah				653	107	16.5	1,011	208	20.6			
Sarawak				975	149	15.4	1,307	230	17.6			
PHILIPPINES ⁽⁵⁾	28,098	8,513	30.3	37,540	12,366	32.9	48,098	17,944	37.3			
SINGAPORE ⁽⁶⁾	1,446 ^{b)}	1,132 ^{b)}	78.0 ^{b)}	2,075	1,562	75.0	2,414	2,414	100.0			
THAILAND	26,258 ⁽⁷⁾	3,274	12.5	34,397 ⁽⁸⁾	4,553	13.2	44,824 ⁽⁹⁾	7,633	17.0			

Source: Demographic Indicators of Countries: Estimates & Projections as Assessed in 1980, UN

- (1) Population of Indonesia, Central Bureau of Statistics
- (2) Statistical Yearbook of Indonesia 1986, Central Bureau of Statistics
- (3) 1980 Population Census of Japan, Statistics Bureau, Prime Minister's Office
- (4) General Report of the Population Census 1980, Vol. 1, Department of Statistics
- (5) National Statistics Office

- (6) Report on the Census of Population 1970, Singapore, Vol. 1, Department of Statistics
- (7) 1960 Population Census, Central Statistical Office, National Economic Development Board
- (8) 1970 Population & Housing Census, National Statistical Office, Office of the Prime Minister
- (9) 1980 Population & Housing Census, National Statistical Office, Office of the Prime Minister

Note: a) For 1957

Fig.1 Annual Change of Death Rates (Per 1,000)

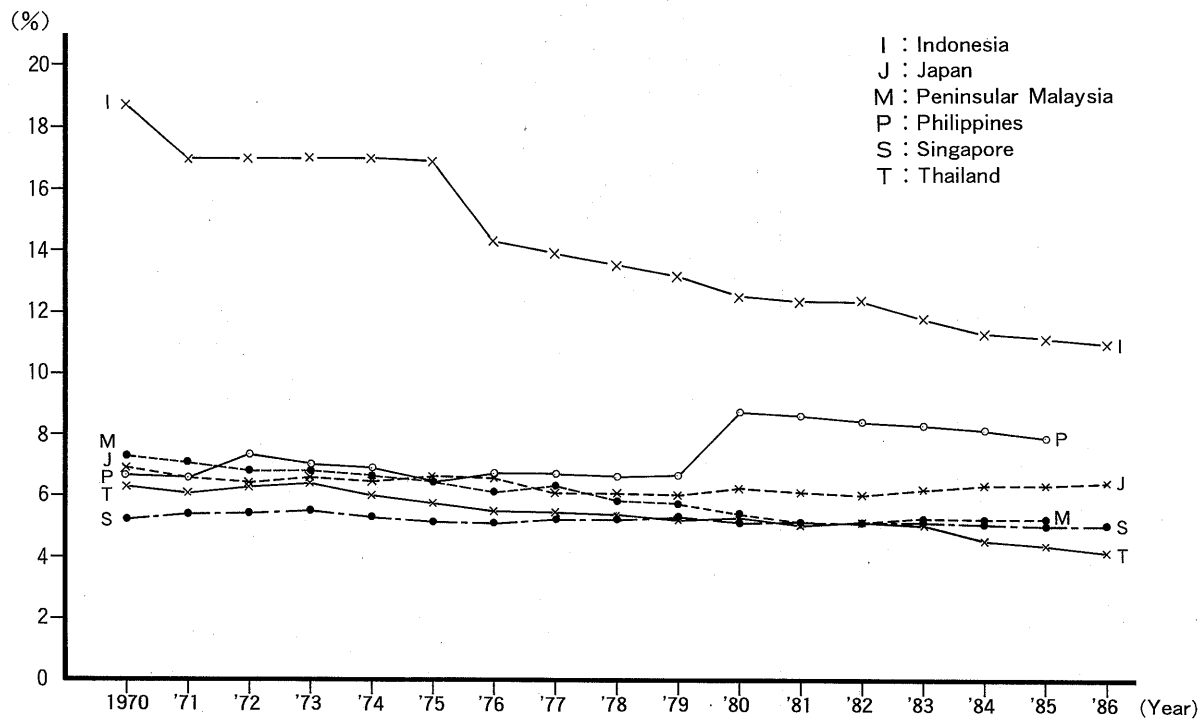


Fig.2 Population Pyramid (1)

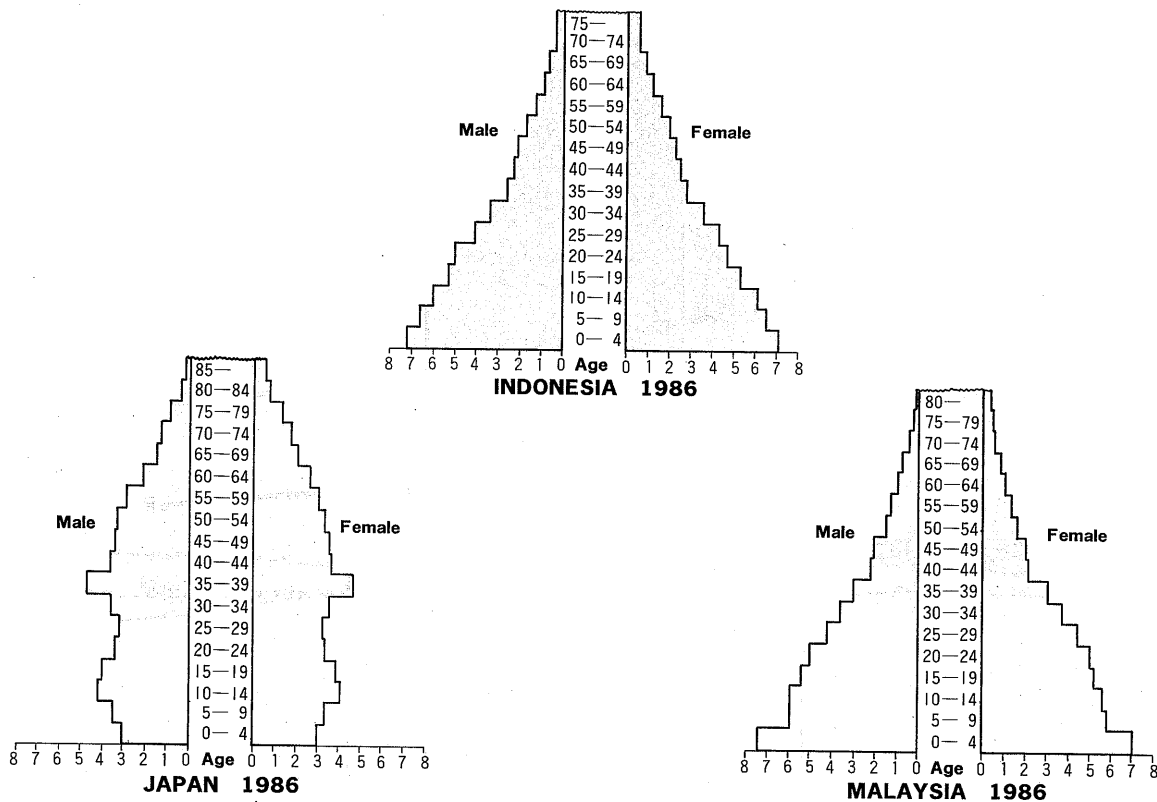
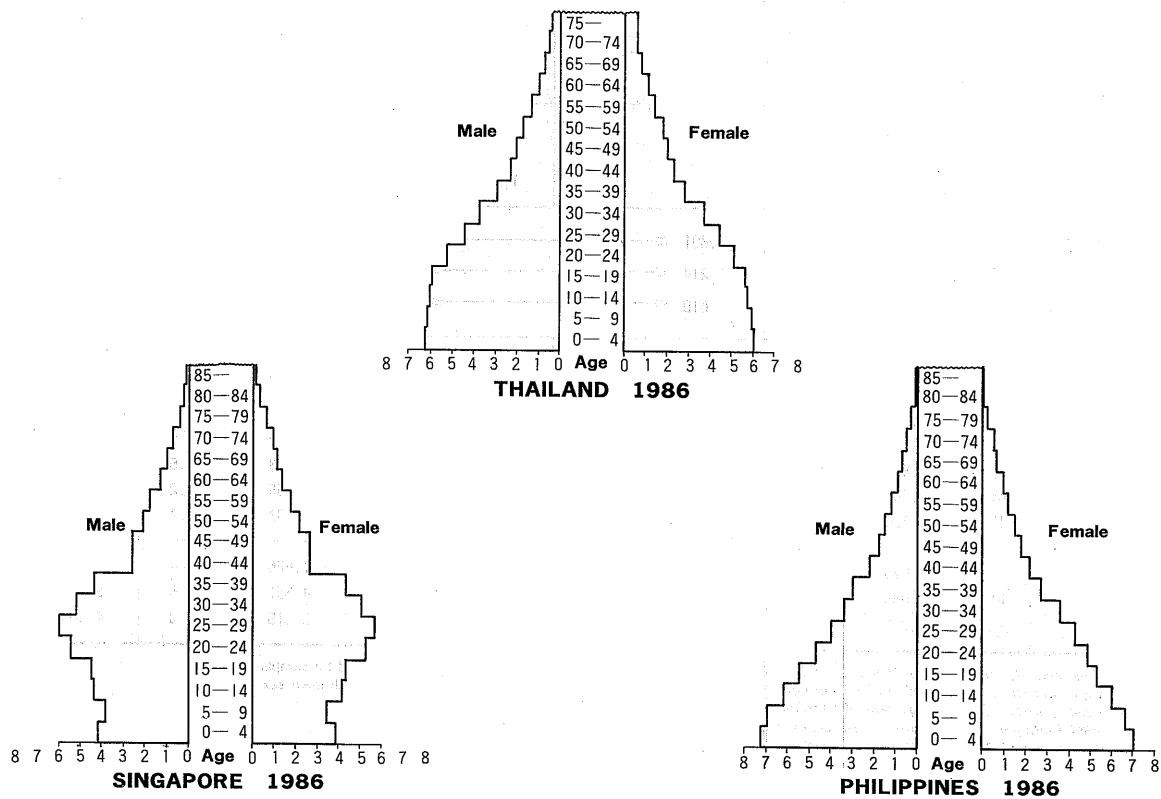


Fig.2 Population Pyramid (2)



2-1 Number of Deaths and Death Rates by Age

	Sex	All Ages		0		1-4		5-14		15-24	
		Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
INDONESIA ^(1) a)	T	2,055	703.0	571	718.1	324	106.1	124	157.5	97	177.1
JAPAN ⁽²⁾	T	750,620	620.6	7,251	524.3	2,831	48.1	3,144	17.5	8,901	50.9
	M	406,918	684.6	4,008	563.5	1,681	55.8	1,980	21.4	6,470	72.4
	F	343,702	558.8	3,243	482.8	1,150	40.1	1,164	13.3	2,431	28.4
MALAYSIA ⁽³⁾	Peninsular Malaysia T	68,367	526.78	8,891	←————→ 488.6			1,787	58.9	3,080	113.7
	Sabah T	4,949	404.9	1,214	←————→ 529.0			238	72.2	327	141.9
	Sarawak T	5,312	359.8	610	←————→ 319.5			112	29.8	230	72.7
PHILIPPINES ⁽⁴⁾	T	313,359	589.1	56,897	3,458.0	39,334	629.4	15,623	113.2	17,181	157.6
	M	186,148	697.2	33,391	3,961.0	21,404	671.9	8,799	124.1	11,638	215.2
	F	127,211	480.2	23,506	2,929.5	17,930	585.2	6,824	101.7	5,543	101.0
SINGAPORE ⁽⁵⁾	T	12,821 ^{b)}	495.7	359 ^{b)}	869.2	70	42.3	93	22.6	354	69.9
	M	7,294	553.9	192	893.0	46	53.4	56	26.2	247	95.0
	F	5,525	435.3	166	838.4	24	30.2	37	18.7	107	43.4
THAILAND ⁽⁶⁾	T	218,025	414.1	8,990		6,880		7,666	61.4	13,112	113.7
	M	125,086	474.4	5,516		3,787		4,351	68.6	8,746	149.1
	F	92,939	353.6	3,834		3,093		3,315	54.0	4,366	77.1

Source: (1) *Household Health Survey in Indonesia 1985/1986*
 (2) *Vital Statistics, Japan, Ministry of Health and Welfare 1985*
 (3) *Vital Statistics 1985, Department of Statistics*
 (4) *1984 Philippine Health Statistics, Department of Health*
 (5) *Department of Statistics, Ministry of Health 1985*
 (6) *Health Statistics Division, Ministry of Public Health, 1983*

Note: a) Calculated by sampling survey
 b) Include unknown sex

(per 100,000 population)

25-34		35-44		45-54		55-64		65-74		75 & over		Unknown	
Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
98	225.4	109	371.5	181	810.2	186	1,248.2	149	2,048.1	216	6,844.1		
10,717	66.0	26,603	133.8	57,613	351.4	97,785	761.2	156,408	1,984.4	378,825	7,668.5	542	
6,960	84.9	17,094	171.6	38,908	478.5	63,845	1,052.5	90,968	2,749.9	174,542	9,239.9	462	
3,757	46.7	9,509	95.8	18,705	226.4	36,940	500.4	65,440	1,431.0	204,283	6,700.0	80	
3,069	150.8	3,508	262.3	5,989	642.1	10,446	1,743.6	14,530	4,251.0	16,816	9,857.0	251	
449	225.1	357	332.7	529	697.0	645	1,524.8	625	2,828.1	511	7,097.2	54	
205	94.8	279	191.6	471	476.7	896	1,281.8	1,262	3,004.8	1,148	6,010.5	99	
20,413	253.0	20,432	398.5	24,810	721.8	29,542	1,372.6	89,043	← → 4,915.3			84	
14,255	360.0	13,689	526.8	16,619	977.6	18,860	1,808.0	47,448	← → 5,463.1			45	
6,158	149.8	6,743	266.6	8,191	471.5	10,682	963.1	41,595	← → 4,410.8			39	
536	95.5	624	173.7	1,214	499.6	2,276	1,427.0	3,261	3,439.9	3,987	9,229.2	47 ^{b)}	
337	117.0	402	220.5	784	641.6	1,474	1,815.3	1,912	4,287.0	1,807	10,505.8	37	
199	72.9	222	125.4	430	356.0	802	1,024.3	1,349	2,687.3	2,180	8,384.6	9	
14,682	173.0	16,194	301.3	25,297	643.8	31,371	1,237.0	37,425	2,818.1	50,812	8,883.2	5,596	
10,180	239.6	10,383	385.6	15,666	820.2	18,871	1,549.3	21,079	3,444.3	23,447	10,283.8	3,420	
4,502	106.2	5,811	216.7	9,631	477.0	12,500	948.4	16,346	2,283.0	27,365	7,954.9	2,176	

3-1 Ten Leading Causes of Death

	Year	1	2	3	4
INDONESIA ⁽¹⁾	1986	Parasitic and Infectious Diseases	Diarrhoea	Respiratory Diseases	Cardiovascular Disorders
JAPAN ⁽²⁾	1986	Malignant Neoplasms	Diseases of Heart	Cerebrovascular Diseases	Pneumonia and Bronchitis
MALAYSIA Peninsular Malaysia ^(3) b)	1985	Heart Diseases and Diseases of Pulmonary Circulation	Certain Conditions Originating in the Perinatal Period	Accidents	Cerebrovascular Diseases
Sabah ^(3) b)	1985	Certain Conditions Originating in the Perinatal Period	Heart Diseases and Diseases of Pulmonary Circulation	Pneumonia	Accidents
Sarawak ^(3) b)	1985	Heart Diseases and Diseases of Pulmonary Circulation	Malignant Neoplasms	Certain Conditions Originating in the Perinatal Period	Cerebrovascular Diseases
PHILIPPINES ⁽⁴⁾	1984	Pneumonia	Diseases of Heart	Tuberculosis All Forms	Diseases of Vascular System
SINGAPORE ⁽⁵⁾	1986	Cancer	Diseases of Heart	Cerebrovascular Diseases	Pneumonia
THAILAND ⁽⁶⁾	1986	Diseases of Heart	Neoplasms	Accidents, Poisonings and Violence	Diseases of Digestive System

Source: (1) *Household Health Survey in Indonesia 1985/1986*
 (2) *Vital Statistics, Japan*, Ministry of Health and Welfare 1986
 (3) *Annual Report 1983/84*, Ministry of Health
 (4) *1984 Philippine Health Statistics*, Department of Health
 (5) Department of Statistics, Ministry of Health
 (6) Health Statistics Division, Office of the Permanent Secretary, Ministry of Public Health

Note: a) The "Symptoms and Ill-Defined Conditions" has been excluded from the "Ten Leading Causes of Death." Those who are interested in the figures of death, the cause of which being classified as symptoms and ill-defined conditions, please see the "Deaths and Death Rates by Cause."
 b) Government hospitals only

5	6	7	8	9	10
Tuberculosis	Certain Condition Original in the Perinatal Period	Injuries and Accidents	Diseases of Digestive System	Neoplasms	Diseases of Nervous System
Accidents, Poisoning and Violence	Suicide	Cirrhosis of Liver	Renal Diseases	Hypertensive Diseases	Diabetes Mellitus
Malignant Neoplasms	Septicaemia	Pneumonia	Nephritis, Nephrotic Syndrome and Nephrosis	Tuberculosis	Diseases of Liver
Cerebrovascular Diseases	Malignant Neoplasms	Tuberculosis	Septicaemia	Malaria	Meningitis
Accidents	Pneumonia	Appendicitis	Septicaemia	Tuberculosis	Nephritis, Nephrotic Syndrome and Nephrosis
Malignant Neoplasms	Diarrhoea	Accidents	Measles	Avitaminosis and Other Nutritional Deficiency	Nephritis, Nephrotic Syndrome and Nephrosis
Accidents	Diabetes Mellitus	Hypertensive Diseases	Nephritis and Nephrosis	Congenital Anomalies	Bronchitis, Emphysema and Asthma
Diseases of Respiratory System	Tuberculosis	Cerebrovascular Diseases	Diseases of Nervous System	Diseases of Genito-urinary System	Certain Causes of Perinatal Mortality

[Thailand]

4-1 Changes in the Order of Cause of Death (1)

Year		1930	1940	1950	1960	1970	1980	1982	1983	1984	1985	1986
Order												
No.1	Cause of Death	Malaria	Malaria	Malaria	Gastro-enteritis	Accidents	Accidents	Accidents	Accidents	Diseases of Heart	Diseases of Heart	Diseases of Heart
	Death Rate per 100,000 Population	342.4	277.8	195.0	38.7	27.2	35.9	33.5	35.4	35.3	36.4	37.4
No.2	Cause of Death	Gastro-enteritis	Gastro-enteritis	T. B. of Respiratory System	T. B. of Respiratory System	T. B. of Respiratory System	Diseases of Heart	Diseases of Heart	Diseases of Heart	Accidents	Accidents and Poisoning	Malignant Neoplasms
	Death Rate per 100,000 Population	159.8	168.8	65.5	34.7	20.8	31.4	34.1	33.7	31.8	28.9	27.9
No.3	Cause of Death	T. B. of Respiratory System	Dysentery	Gastro-enteritis	Pneumonia	Diarrhoea	Malignant Neoplasms	Malignant Neoplasms	Malignant Neoplasms	Malignant Neoplasms	Malignant Neoplasms	Accidents and Poisoning
	Death Rate per 100,000 Population	79.2	110.0	66.1	32.5	17.6	23.6	26.1	27.0	26.1	27.0	24.8
No.4	Cause of Death	Dysentery	T. B. of Respiratory System	Pneumonia	Malaria	Diseases of Heart	T. B. of Respiratory System	T. B. of Respiratory System	T. B. of Respiratory System	T. B. of Respiratory System	T. B. of Respiratory System	T. B. of Respiratory System
	Death Rate per 100,000 Population	74.3	80.9	39.4	30.2	15.3	14.3	11.9	11.0	10.2	10.3	9.8
No.5	Cause of Death	Pneumonia	Pneumonia	Dysentery	Diseases of Heart	Pneumonia	Pneumonia	Pneumonia	Pneumonia	Pneumonia	Pneumonia	Pneumonia
	Death Rate per 100,000 Population	22.0	48.7	32.8	19.0	14.8	10.0	9.6	10.0	7.5	7.4	6.3

Source: Health Statistics Division, Ministry of Public Health

4-1 Changes in the Order of Cause of Death (2)

[Japan]

Year		1899	1920	1930	1940	1950	1960	1970	1980	1984	1985	1986
Order												
No.1	Cause of Death	Pneumonia and Bronchitis	Pneumonia and Bronchitis	Gastro-enteritis	Tuberculosis	Tuberculosis	Cerebro-vascular Diseases	Cerebro-vascular Diseases	Cerebro-vascular Diseases	Malignant Neoplasms	Malignant Neoplasms	Malignant Neoplasms
	Death Rate per 100,000 Population	206.1	408.0	221.4	212.9	146.4	160.7	175.8	139.5	152.5	156.0	
No.2	Cause of Death	Cerebro-vascular Diseases	Gastro-enteritis	Pneumonia and Bronchitis	Pneumonia and Bronchitis	Cerebro-vascular Diseases	Malignant Neoplasms	Malignant Neoplasms	Malignant Neoplasms	Cerebro-vascular Diseases	Diseases of Heart	Diseases of Heart
	Death Rate per 100,000 Population	170.5	254.2	200.1	185.8	127.1	100.4	116.3	139.1	117.2	117.3	
No.3	Cause of Death	Tuberculosis	Tuberculosis	Tuberculosis	Cerebro-vascular Diseases	Pneumonia and Bronchitis	Diseases of Heart	Diseases of Heart	Diseases of Heart	Diseases of Heart	Cerebro-vascular Diseases	Cerebro-vascular Diseases
	Death Rate per 100,000 Population	155.7	223.7	185.6	177.7	93.2	73.2	86.7	106.2	113.9	112.2	
No.4	Cause of Death	Gastro-enteritis	Influenza	Cerebro-vascular Diseases	Gastro-enteritis	Gastro-enteritis	Pneumonia and Bronchitis	Accidents, Poisoning and Violence	Pneumonia and Bronchitis	Pneumonia and Bronchitis	Pneumonia and Bronchitis	Pneumonia and Bronchitis
	Death Rate per 100,000 Population	149.7	193.7	162.8	159.2	82.4	58.0	42.5	33.7	37.6	42.7	
No.5	Cause of Death	Senility	Cerebro-vascular Diseases	Senility	Senility	Malignant Neoplasms	Accidents, Poisoning and Violence	Pneumonia and Bronchitis	Accidents, Poisoning and Violence	Accidents, Poisoning and Violence	Accidents, Poisoning and Violence	Accidents, Poisoning and Violence
	Death Rate per 100,000 Population	127.2	157.6	118.8	124.5	77.4	49.3	34.1	25.1	24.6	24.4	

Source: Ministry of Health and Welfare

4-1 Changes in the Order of Cause of Death (3)

[Philippines]

Year		1960	1965	1970	1975	1980	1981	1982	1983	1984		
Order												
No.1	Cause of Death	Pneumonia	Pneumonia	Pneumonia	Pneumonia	Pneumonia	Pneumonia	Pneumonia	Pneumonia	Pneumonia		
	Death Rate per 100,000 Population	100.4	83.4	118.2	102.0	93.6	87.1	89.3	93.6	86.4		
No.2	Cause of Death	T. B. (All forms)	Respiratory T. B.	T. B. (All forms)	T. B. (All forms)	Diseases of Heart	Diseases of Heart	Diseases of Heart	Diseases of Heart	Diseases of Heart		
	Death Rate per 100,000 Population	92.1	83.4	80.1	69.2	60.8	68.7	72.5	62.6	58.9		
No.3	Cause of Death	Gastro- enteritis & Colitis	Gastro- enteritis & Colitis	Diseases of Vascular System	Diseases of Heart	T. B. (All forms)	T. B. (All forms)	T. B. (All forms)	T. B. (All forms)	T. B. (All forms)		
	Death Rate per 100,000 Population	60.5	46.0	35.8	56.6	59.6	55.1	55.7	55.0	52.6		
No.4	Cause of Death	Bronchitis	Bronchitis	Gastro- enteritis & Colitis	Diseases of Vascular System	Diseases of Vascular System	Diseases of Vascular System	Diseases of Vascular System	Diseases of Vascular System	Diseases of Vascular System		
	Death Rate per 100,000 Population	57.2	43.1	35.0	31.8	43.8	42.6	42.4	51.9	51.0		
No.5	Cause of Death	Beri-beri	Beri-beri	Diseases of Heart	Malignant Neoplasms	Diarrhoea	Malignant Neoplasms	Diarrhoea	Malignant Neoplasms	Malignant Neoplasms		
	Death Rate per 100,000 Population	54.4	32.8	34.0	29.4	33.2	32.7	33.1	34.6	33.3		

Source: Philippine Health Statistics, 1960-1984, Department of Health

4-1 Changes in the Order of Cause of Death (4)

[Indonesia]

Order \ Year		1972	1980	1985								
No.1	Cause of Death	Diarrhoea	Lower Respiratory Tract Infection	Diarrhoea								
	Death Rate per 100,000 Population	425.7	146.0	84.5								
No.2	Cause of Death	Lower Respiratory Tract Infection	Diarrhoea	Tuberculosis								
	Death Rate per 100,000 Population	331.1	137.9	60.2								
No.3	Cause of Death	Tuberculosis	Cardio-vascular Diseases	Diphtheria, Measles, & Cough								
	Death Rate per 100,000 Population	165.6	73.0	53.0								
No.4	Cause of Death	Cardiovascular Disorder & Nervous System	Tuberculosis	Tetanus								
	Death Rate per 100,000 Population	141.9	61.7	42.1								
No.5	Cause of Death	Tetanus	Tetanus	Malaria								
	Death Rate per 100,000 Population	141.9	47.9	23.9								

Source: Household Survey

5-1 Deaths and Death Rates by Cause (ICD-9) (1)

	Year	Sex	All Causes		01-07		011		010,019,012, -016		020-021	
					Infectious and Parasitic Diseases		Typhoid Fever		Other Intestinal Infectious Diseases		Tuberculosis of Respiratory System	
			Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
INDONESIA ^(1) a)	1986	T					1,195	0.71	2,245	1.33	2,473	1.47
		M					730	0.87	1,095	1.30	1,615	1.92
		F					465	0.55	1,150	1.36	858	1.01
JAPAN ⁽²⁾	1986	T	750,620	620.6	10,963	9.1	-	-	923	0.8	4,001	3.3
		M	406,918	684.6	6,653	11.2	-	-	376	0.6	3,023	5.1
		F	343,702	558.8	4,310	7.0	-	-	547	0.9	978	1.6
MALAYSIA ^(3) a) Peninsular Malaysia Sabah Sarawak	1986	T	17,452	130.98	1,752	13.15	12	0.10	11	0.09	306	2.48
	1985	T	2,932	230.68	594	46.73	13	1.02	5	0.39	109	8.58
	1981	T	1,997	131.91	221	14.60	-	-	12	0.79	63	4.16
PHILIPPINES ⁽⁴⁾	1984	T	313,359	589.1	57,569	108.2	820 ^{b)}	1.5	23	0.04	27,471	51.6
		M	186,148	697.2	34,421	128.9	478	1.8	11	0.04	17,146	64.2
		F	127,211	480.2	23,148	87.4	342	1.3	12	0.05	10,325	39.0
SINGAPORE ⁽⁵⁾	1986	T	12,821	495.7	402	15.5	2	0.1	41	1.6	160	6.2
		M	7,294	553.9	249	18.9	-	-	18	1.4	123	9.3
		F	5,525	435.3	153	12.1	2	0.2	23	1.8	37	2.9
THAILAND ⁽⁶⁾	1986	T	218,025	414.1	14,024	26.6	87	0.2	2,026	3.8	5,131	9.7
		M	125,086	474.4	8,410	31.9	50	0.2	1,158	4.4	3,308	12.5
		F	92,939	353.6	5,614	21.4	37	0.1	868	3.1	1,823	6.9

Source: (1) Directorate General of Medical Care, MOH
Based on 10-days sample of discharges from hospitals for each quarter in 1986
(2) *Vital Statistics, Japan*, Ministry of Health and Welfare 1985
(3) Information and Documentation System Unit, Ministry of Health
(4) *1984 Philippine Health Statistics*, Department of Health
(5) Department of Statistics, Ministry of Health
(6) Ministry of Public Health (official data)

Note: a) Government hospitals only (p. 28)
b) Include paratyphoid fever (p. 28)
c) Include malignant neoplasm of pleura (p. 31)
d) Lymphatic tissue only (p. 33)
e) Include goiter, thyrotoxicosis, hypothyroidism (p. 33)
f) Include with and without heart involvement (p. 36)
g) Include accidents by suffocation and foreign bodies (p. 43)
h) Include unknown sex (p. 43)

(per 100,000 population)

022—025,029		034		036		037		038		030—033,035, 039		042		040,041,043 —049	
Tuberculosis, Other Forms		Whooping Cough		Meningococcal Infection		Tetanus		Septicaemia		Other Bacterial Diseases		Measles		Other Viral Diseases	
Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
64	0.04	—	—	—	—	1,460	0.87	675	0.40	374	0.22	101	0.06	611	0.36
18	0.02	—	—	—	—	940	1.12	420	0.50	164	0.20	55	0.07	310	0.37
46	0.05	—	—	—	—	520	0.61	255	0.30	210	0.25	46	0.05	301	0.36
169	0.1	5	0.0	4	0.0	22	0.0	2,550	2.1	169	0.1	68	0.1	1,531	1.3
89	0.1	2	0.0	2	0.0	16	0.0	1,159	1.9	85	0.1	39	0.1	860	1.4
80	0.1	3	0.0	2	0.0	6	0.0	1,391	2.3	84	0.1	29	0.0	671	1.1
19	0.14	—	—	7	0.05	27	0.20	1,191	8.94	14	0.11	2	0.02	56	0.42
14	1.10	—	—	2	0.16	20	0.57	147	11.57	9	0.71	30	2.36	25	1.97
6	0.40	—	—	2	0.13	2	0.13	69	4.56	27	1.78	3	0.20	13	0.86
528	1.0	51	0.1	43	0.08	924	1.7	3,970	7.5	218	0.4	7,987	15.0	233	0.4
304	1.1	20	0.07	16	0.06	664	2.3	2,133	8.0	114	0.4	4,209	15.8	141	0.5
224	0.8	31	0.1	27	0.1	320	1.2	1,837	6.9	104	0.4	3,778	14.3	92	0.3
17	0.7	—	—	2	0.1	—	—	125	4.8	2	0.1	1	0.0	31	1.2
12	0.9	—	—	1	0.1	—	—	58	4.4	1	0.1	1	0.1	18	1.4
5	0.4	—	—	1	0.1	—	—	67	5.3	1	0.1	—	—	13	1.0
29	0.1	9	0.0	2	0.0	330	0.6	2,978	5.7	236	0.4	56	0.1	933	1.8
20	0.1	6	0.0	1	0.0	203	0.8	1,609	6.1	138	0.5	34	0.1	537	2.0
9	0.0	3	0.0	1	0.0	127	0.5	1,369	5.2	98	0.4	22	0.1	396	1.5

5-1 Deaths and Death Rates by Cause (ICD-9) (2)

	Year	Sex	052		050,051,053 054,059		06		07		08-14	
			Malaria		Other Arthropodborne Diseases		Venereal Diseases		Other Infectious and Parasitic Diseases		Malignant Neoplasms	
			Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
INDONESIA	1986	T	365	0.22	—	—	—	—	92	0.05	36	0.02
		M	246	0.2	—	—	—	—	46	0.05	27	0.03
		F	119	0.14	—	—	—	—	46	0.05	9	0.01
JAPAN	1985	T	1	0.0	6	0.0	66	0.1	1,449	1.2	197,755	163.5
		M	1	0.0	3	0.0	41	0.1	958	1.6	117,016	196.9
		F	—	—	3	0.0	25	0.0	491	0.8	80,739	131.3
MALAYSIA	1986	T	26	0.20	1	0.01	5	0.04	17	0.13	1,470	11.03
		T	74	5.82	15	0.18	—	—	3	0.24	259	20.38
		T	1	0.07	—	—	—	—	5	0.33	240	15.85
PHILIPPINES	1984	T	923	1.7	30	0.06			220	0.4	17,700	33.3
		M	599	2.2	16	0.06			124	0.5	9,557	35.8
		F	324	1.2	14	0.05			102	0.4	8,143	30.7
SINGAPORE	1986	T	2	0.1	—	—	9	0.3	10	0.4	2,887	111.6
		M	1	0.1	—	—	8	0.6	8	0.6	1,679	127.5
		F	1	0.1	—	—	1	0.1	2	0.2	1,208	95.2
THAILAND	1986	T	1,540	2.9	—	—	18	0.0	643	1.2	14,720	28.0
		M	992	3.8	—	—	14	0.1	340	1.3	8,387	31.8
		F	548	2.1	—	—	4	0.0	303	1.2	6,333	24.1

(per 100,000 population)

08		090		091		093		094		095		100		101	
Malignant Neoplasm of Lip, Oral Cavity and Pharynx		Malignant Neoplasm of Oesophagus		Malignant Neoplasm of Stomach		Malignant Neoplasm of Colon		Malignant Neoplasm of Rectum, Rectosigmoid Junction and Anus		Malignant Neoplasm of Liver, Specified as Primary		Malignant Neoplasm of Larynx		Malignant Neoplasm of Trachea, Bronchus and Lung	
Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
		9	0.01	46	0.03	55	0.03	55	0.03	529	0.3	—	—	329	0.19
		—	—	37	0.04	46	0.05	37	0.04	401	0.5	—	—	256	0.30
		9	0.01	9	0.01	9	0.01	18	0.02	128	0.2	—	—	73	0.09
2,244	1.9	6,385	5.3	48,266	39.9	11,878	9.8	8,152	6.7	14,005	11.6	806	0.7	29,535	24.4
1,611	2.7	5,202	8.7	30,127	50.7	5,895	9.9	4,732	8.0	10,546	17.7	740	1.2	21,447	36.1
633	1.0	1,183	1.9	18,139	29.5	5,983	9.7	3,420	5.6	3,459	5.6	66	0.1	8,088	13.1
115	0.86	10	0.53	149	1.12	59	0.44	45	0.34	85	0.64	26	0.20	319	2.39
20	1.57	9	0.71	36	2.83	12	0.94	12	0.94	26	2.05	5	0.39	40	3.15
14	0.92	6	0.40	24	1.59	9	0.59	10	0.66	14	0.92	3	0.20	38	2.51
1,188	2.2	165	0.3	1,413	2.7	145	0.3	370	0.7			114	0.2	2,218 ^{c)}	4.2
641	2.4	103	0.4	822	3.1	70	0.3	223	0.8			75	0.3	1,578	5.9
547	2.1	62	0.2	591	2.2	159	0.3	147	0.6			39	0.1	640	2.1
198	7.7	104	4.0	314	12.1	224	8.7	110	4.3	67	2.6	52	2.0	692	26.8
140	10.6	75	5.7	217	16.5	99	7.5	63	4.8	50	3.8	46	3.5	476	36.1
58	4.6	29	2.3	97	7.6	125	9.8	47	3.7	17	1.3	6	0.5	216	17.0
886	0.5	136	0.3	286	0.5	378	0.7	15	0.0	8	0.0	33	0.1	1,070	2.0
187	0.7	100	0.4	186	0.7	228	0.9	5	0.0	7	0.0	31	0.1	722	2.7
99	0.4	36	0.1	100	0.4	150	0.6	10	0.0	1	0.0	3	0.0	348	1.3

5-1 Deaths and Death Rates by Cause (ICD-9) (3)

	Year	Sex	113		120		122		124		126	
			Malignant Neoplasm of Female Breast		Malignant Neoplasm of Cervix Uteri		Malignant Neoplasm of Uterus, Other and Unspec.		Malignant Neoplasm of Prostate		Malignant Neoplasm of Bladder	
			Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
INDONESIA	1986	T	73	0.04	91	0.05	27	0.02	18	0.01	—	—
		M	..	..	..	..	..	..	18	0.02	—	—
		F	73	0.09	91	0.11	27	0.03	..	..	—	—
JAPAN	1986	T	5,127	4.2	1,730	1.4	2,974	2.6	2,756	2.2	2,602	2.2
		M	..	..	..	..	..	..	2,756	4.5	1,807	3.0
		F	5,127	8.3	1,730	2.8	2,904	4.8	..	..	795	1.3
MALAYSIA Peninsular Malaysia Sabah Sarawak	1986	T	79	0.59	44	0.33	8	0.06	14	0.11	15	0.11
		T	5	0.39	7	0.55	2	0.16	3	0.24	4	0.31
		T	15	0.99	10	0.66	—	—	—	—	3	0.20
PHILIPPINES	1984	T	1,140	2.1	348	0.7	711	1.3	219	0.4		
		M	..	..	..	..	..	..	219	0.8		
		F	1,140	4.2	348	1.4	711	2.7	..	..		
SINGAPORE	1986	T	158	6.1	92	3.6	21	0.8	38	1.5	46	1.1
		M	..	..	..	..	..	..	38	2.9	32	2.4
		F	158	12.4	92	7.2	21	1.7	..	..	14	1.1
THAILAND	1986	T	158	0.3	106	0.2	337	0.6	27	0.1	52	0.1
		M	..	..	..	..	..	..	27	0.1	35	0.1
		F	158	0.6	106	0.4	337	1.3	..	..	17	0.1

(per 100,000 population)

Rest		141		140,149		15-17		181		180,182,183,189		191		192	
Malignant Neoplasm of Other Sites		Leukaemia		Other Malignant Neoplasms of Lymphatic and Haemopoietic		Benign Neoplasm, Other and Unspecified Neoplasms		Diabetes Mellitus		Other Endocrine and Metabolic Diseases		Nutritional Marasmus		Other Protein-calorie Malnutrition	
Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
529	0.31	247	0.16	74	0.04	612	0.36	766	0.45	210	0.12	36	0.02	146	0.09
274	0.33	173	0.21	37	0.04	329	0.39	465	0.55	100	0.12	18	0.02	91	0.11
255	0.30	101	0.12	37	0.04	283	0.33	301	0.35	110	0.13	18	0.02	55	0.06
7,188	5.9	5,406	4.5	6,365	5.3	6,099	5.0	9,144	7.6	245	0.2	—	—	252	0.2
3,495	5.9	3,116	5.2	6,683	6.2	3,425	5.8	4,335	7.3	107	0.2	—	—	152	0.3
3,693	6.0	2,290	3.7	2,682	4.0	2,674	4.3	4,809	7.8	138	0.2	—	—	100	0.2
83	0.62	111	0.83	61	0.46	80	0.60	221	1.66	15	0.11	—	—	21	0.16
9	0.71	18	1.42	9	0.71	13	1.02	22	1.71	1	0.08	1	0.08	6	0.47
14	0.92	24	1.59	18	1.19	11	0.73	21	1.39	1	0.07	—	—	5	0.33
5,818	12.0	1,436	2.7	229 ^{d)}	0.4	145	0.3	2,271	4.3	3,701 ^{e)}	7.0	144	0.3	1,031	1.9
3,750	15.5	726	2.7	147	0.6	64	0.2	1,094	4.1	2,122	7.9	73	0.3	564	2.1
2,068	8.6	710	2.7	82	0.3	81	0.3	1,177	4.4	1,579	6.0	71	0.3	467	1.8
636	24.6	69	2.7	66	2.6	34	1.3	479	18.5	20	0.8	—	—	9	0.3
362	27.5	41	3.1	40	3.0	18	1.4	200	15.2	7	0.5	—	—	6	0.5
274	21.6	28	2.2	26	2.0	16	1.3	279	22.0	13	1.0	—	—	3	0.2
11,388	21.6	372	0.7	68	0.1	—	—	1,798	3.4	89	0.2	97	0.2	2	0.0
6,625	25.1	189	0.7	45	0.2	—	—	829	3.1	35	0.1	51	0.2	1	0.0
4,763	18.1	183	0.7	23	0.1	—	—	969	3.7	54	0.2	46	0.2	1	0.0

5-1 Deaths and Death Rates by Cause (ICD-9) (4)

	Year	Sex	190,193		200		209		21		220	
			Other Nutritional Deficiencies		Anaemias		Other Diseases of Blood and Blood-forming Organs		Mental Disorders		Meningitis	
			Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
INDONESIA	1986	T	73	0.04	493	0.29	119	0.07	210	0.12	658	0.51
		M	27	0.03	219	0.26	46	0.05	137	0.16	411	0.49
		F	46	0.05	274	0.32	73	0.09	73	0.09	447	0.53
JAPAN	1986	T	239	0.2	1,529	1.3	1,482	1.2	3,016	2.5	550	0.5
		M	122	0.2	657	1.1	780	1.3	1,465	2.5	327	0.6
		F	117	0.2	872	1.4	702	1.1	1,596	2.6	223	0.4
MALAYSIA Peninsular Malaysia Sabah Sarawak	1986	T	12	0.09	52	0.39	56	0.42	29	0.22	127	0.95
		T	5	0.39	22	1.71	14	1.10	4	0.31	74	5.82
		T	12	0.79	7	0.46	9	0.59	11	0.73	27	1.78
PHILIPPINES	1984	T	4,967	9.3	2,232	4.2	306	0.6	412	0.8	2,853	5.4
		M	2,672	10.0	1,172	4.4	172	0.6	289	1.1	1,633	6.1
		F	2,295	8.7	1,060	4.0	134	0.5	123	0.5	1,220	4.6
SINGAPORE	1986	T	—	—	17	0.7	13	0.5	18	0.7	12	0.5
		M	—	—	10	0.8	7	0.5	7	0.5	5	0.4
		F	—	—	7	0.6	6	0.5	11	0.9	7	0.6
THAILAND	1986	T	128	0.2	144	0.3	63	0.1	334	0.6	402	0.8
		M	122	0.5	67	0.2	33	0.1	270	1.0	257	1.0
		F	6	0.0	77	0.3	30	0.1	64	0.2	145	0.6

(per 100,000 population)

223		225		221,222,224, 229,23,24		25-30		250		251		26		270	
Multiple Sclerosis		Epilepsy		Other Diseases of Nervous System and Sense Organs		Diseases of Circulatory System		Acute Rheumatic Fever		Chronic Rheumatic Heart Disease		Hypertensive Disease		Acute Myocardial Infarction	
Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
—	—	45	0.03	2,354	1.40			45	0.03	128	0.08	877	0.52	694	0.41
—	—	18	0.02	1,351	1.61			—	—	64	0.08	520	0.62	484	0.58
—	—	27	0.03	1,003	1.18			46	0.05	64	0.08	357	0.42	210	0.25
69	0.1	440	0.4	5,596	4.6	291,027	240.6	49	0.0	1,529	1.3	11,689	9.7	29,876	24.7
27	0.0	243	0.4	3,035	5.1	142,442	239.6	18	0.0	503	0.8	4,555	7.7	16,946	28.5
42	0.1	197	0.3	2,561	4.2	148,585	241.6	31	0.0	1,026	1.7	7,134	11.6	12,980	21.0
18	0.14	16	0.12	177	1.33	5,167	38.78	3	0.02	87	0.65	202	1.52	1,701	12.77
1	0.08	5	0.39	28	2.21	412	32.42	—	—	5	0.39	22	1.73	69	5.43
10	0.66	1	0.07	29	1.92	479	31.64	—	—	30	1.98	23	1.52	78	5.15
		778	1.5	1,459	2.7	58,442	109.9	33	0.06	1,999	3.8	10,725	20.2	8,270	15.5
		493	1.8	827	3.1	33,629	126.0	19	0.07	934	3.5	6,172	23.1	5,410	20.3
		285	1.1	632	2.4	24,813	93.7	14	0.05	1,065	4.0	4,553	17.2	2,860	10.8
—	—	13	0.5	62	2.4	4,482	173.3	—	—	57	2.2	266	10.3	1,758	68.0
—	—	6	0.5	34	2.6	2,420	183.8	—	—	22	1.7	120	9.1	1,073	81.5
—	—	7	0.6	28	2.2	2,062	162.5	—	—	35	2.8	146	11.5	685	54.0
—	—	226	0.4	4,095	7.8	27,137	51.5	2	—	263	0.5	1,697	3.2	370	0.7
—	—	146	0.6	2,476	9.4	16,541	62.7	2	—	143	0.5	1,019	3.9	224	0.8
—	—	80	0.3	1,619	6.2	10,596	40.3	—	—	120	0.5	678	2.6	146	0.6

5-1 Deaths and Death Rates by Cause (ICD-9) (5)

	Year	Sex	279		28		29		300		301,302	
			Other Ischaemic Heart Diseases		Diseases of Pulmonary Circulation and Other Forms of Heart Diseases		Cerebrovascular Diseases		Atherosclerosis		Embolism, Thrombosis and Other Dis. of Arteries, Arterioles & Capillaries	
			Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
INDONESIA	1986	T	630	0.37	3,267	1.94	3,285	1.95	—	—	18	0.01
		M	520	0.62	1,898	2.26	1,624	1.93	—	—	9	0.01
		F	110	0.13	1,369	1.62	1,661	1.96	—	—	9	0.01
JAPAN	1986	T	18,597	15.7	92,579	76.5	129,289	106.9	3,001	2.5	3,722	3.1
		M	8,955	15.1	45,668	76.8	61,832	104.0	1,218	2.0	2,330	3.9
		F	9,642	15.7	46,911	76.3	67,457	109.7	1,783	2.9	1,392	2.3
MALAYSIA Peninsular Malaysia Sabah Sarawak	1986	T	205	1.54	1,417	10.64	1,456	10.93	3	0.02	32	0.24
		T	18	1.42	164	12.90	125	9.83	—	—	2	0.16
		T	14	0.92	165	10.90	155	10.24	—	—	3	0.20
PHILIPPINES	1984	T	3,952	7.4	15,905	29.9	13,909 ^{f)}	26.1	2,092	3.9	252	0.5
		M	2,096	7.9	8,671	32.5	8,253	30.9	1,054	3.9	146	0.5
		F	1,856	7.0	7,234	27.3	5,656	21.3	1,038	3.9	106	0.4
SINGAPORE	1986	T	564	21.8	383	14.8	1,355	52.4	10	0.4	75	2.9
		M	304	23.1	215	16.3	626	47.5	4	0.3	49	3.7
		F	260	20.5	168	13.2	729	57.4	6	0.5	26	2.0
THAILAND	1986	T	354	0.7	18,694	35.5	4,844	9.2	—	—	73	0.1
		M	230	0.9	11,311	42.9	3,042	11.5	—	—	44	0.2
		F	124	0.5	7,383	28.1	1,802	6.9	—	—	29	0.1

(per 100,000 population)

303		304,305,309		310-312		320		321		322		323		313-315,319 324-327,329	
Phlebitis, Thrombophlebitis, Venous Embolism and Thrombosis		Other Diseases of Circulatory System		Acute Upper Respiratory Infection		Acute Bronchitis and Bronchiolitis		Pneumonia		Influenza		Bronchitis, Chronic and Unspecified, Emphysema and Asthma		Other Diseases of Respiratory System	
Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
18	0.01	128	0.08	128	0.08	475	0.28	2,802	1.66	155	0.09	584	0.35	694	0.41
18	0.02	73	0.09	46	0.05	429	0.51	1,351	1.61	155	0.18	411	0.49	484	0.58
—	—	55	0.06	82	0.10	46	0.05	1,451	1.71	—	—	173	0.20	210	0.25
90	0.1	606	0.5	1,060	0.9	1,635	1.4	47,256	39.1	280	0.2	14,099	11.7	10,152	8.4
45	0.1	372	0.6	466	0.8	799	1.3	26,739	45.0	130	0.2	8,999	15.1	6,594	11.1
45	0.1	234	0.4	737	1.2	836	1.4	20,517	33.4	150	0.2	5,100	8.3	3,558	5.8
3	0.02	55	0.41	7	0.05	14	0.11	478	3.58	—	—	26	0.20	773	5.80
—	—	7	0.55	3	0.24	3	0.24	283	22.27	—	—	4	0.31	101	7.95
—	—	10	0.66	3	0.20	2	0.13	93	6.14	—	—	3	0.20	103	6.80
322	0.7	1,305	2.5	130	0.2	1,634	3.1	45,971	86.4	1,150	2.2			4,859	9.1
184	0.8	874	3.3	79	0.3	930	3.5	25,673	96.2	628	2.4			2,764	10.4
138	0.6	431	1.6	51	0.2	704	2.7	20,298	76.6	522	2.0			2,095	7.9
5	0.2	9	0.3	4	0.2	—	—	1,082	41.8	2	0.1	187	7.2	699	27.0
—	—	7	0.5	3	0.2	—	—	566	43.0	1	0.1	107	8.1	506	38.4
5	0.4	2	0.2	1	0.1	—	—	516	40.7	1	0.1	80	6.3	193	15.2
3	0.0	807	1.5	467	0.9	—	—	3,319	6.3	353	0.7	842	1.6	1,411	2.7
2	0.0	494	1.9	254	1.0	—	—	2,003	7.6	199	0.8	561	2.1	897	3.4
1	0.0	313	1.2	213	0.8	—	—	1,316	5.0	154	0.6	281	1.7	514	2.0

5-1 Deaths and Death Rates by Cause (ICD-9) (6)

	Year	Sex	341		342		343,344		347		33,340,345,346, 348,349	
			Ulcer of Stomach and Duodenum		Appendicitis		Hernia of Abdominal Cavity and Intestinal Obstruction		Chronic Liver Disease and Cirrhosis		Other Diseases of Digestive System	
			Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
INDONESIA	1986	T	55	0.03	247	0.15	1,232	0.73	1,834	1.09	1,899	1.13
		M	18	0.02	210	0.25	821	0.98	1,296	1.54	1,132	1.35
		F	37	0.04	37	0.04	411	0.49	538	0.64	767	0.91
JAPAN	1986	T	4,227	3.5	104	0.1	2,687	2.2	16,943	14.0	13,528	11.2
		M	2,297	3.9	62	0.1	1,226	2.1	11,737	19.7	6,871	11.6
		F	1,930	3.1	42	0.1	1,461	2.4	5,206	8.5	6,657	11.1
MALAYSIA Peninsular Malaysia Sabah Sarawak	1986	T	78	0.59	2	0.02	65	0.49	209	1.57	370	2.78
		T	24	1.89	2	0.16	17	1.34	16	1.26	85	6.69
		T	30	1.98	2	0.13	16	1.06	21	1.39	43	2.84
PHILIPPINES	1984	T	5,012	9.4	328	0.6	105	0.2	1,926	3.6	4,379	8.2
		M	3,526	13.2	199	0.7	87	0.3	1,543	5.8	3,015	11.3
		F	1,846	7.0	129	0.5	18	0.07	383	1.4	1,364	5.1
SINGAPORE	1986	T	61	2.4	4	0.2	22	0.9	115	4.4	124	4.8
		M	44	3.3	3	0.2	11	0.8	92	7.0	73	5.5
		F	17	1.3	1	0.1	11	0.9	23	1.8	51	4.0
THAILAND	1986	T	773	1.5	94	0.2	129	0.2	4,211	8.0	4,568	8.7
		M	508	1.9	58	0.2	80	0.3	2,977	11.3	2,982	11.3
		F	265	1.0	36	0.1	49	0.2	1,244	4.7	1,586	6.0

(per 100,000 population)

(per 100,000 population)

350		351		360		37,352,353,359 361-363,369		38		390		391		394	
Nephritis, Nephrotic Syndrome and Nephrosis		Infections of Kidney		Hyperplasia of Prostate		Other Diseases of Genito-urinary System		Abortion		Haemorrhage of Pregnancy and Childbirth		Toxaemia of Pregnancy		Complications of Puerperium	
Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1,031	0.61	36	0.02	82	0.05	283	0.17	110	0.07	155	0.09	192	0.11	18	0.01
520	0.62	18	0.02	82	0.10	137	0.16	..	..	..	..	..	..	..	..
511	0.60	19	0.02	..	..	147	0.17	110	0.13	155	0.18	192	0.23	18	0.02
13,984	11.6	1,215	1.0	277	0.2	2,265	1.9	17	0.0	65	0.0	33	0.0	48	0.0
7,002	11.8	699	1.2	277	0.5	797	1.3	..	..	..	..	..	..	..	..
6,982	11.4	516	0.8	..	..	1,468	2.4	7	0.0	65	0.1	33	0.1	48	0.1
399	2.99	3	0.02	1	0.01	288	2.16	5	0.04	20	0.15	11	0.08	8	0.06
85	6.69	—	—	1	0.08	24	1.89	1	0.08	4	0.31	—	—	6	0.47
27	1.78	5	0.33	—	—	29	1.92	10	0.66	2	0.13	1	0.07	2	0.13
4,916	9.2	330	0.6	30	0.06	652	1.2	123	0.2	90	0.2			354	0.7
2,940	11.0	193	0.7	30	0.1	343	1.3	..	..	..	..			..	..
1,976	7.5	137	0.5	..	..	309	1.2	123	0.5	90	0.3			354	1.3
253	9.8	15	0.6	—	—	75	2.9	2	0.1	—	—	1	0.0	2	0.1
126	9.6	3	0.2	—	—	34	2.6	—	—	..	..	..	..	..	..
127	10.0	12	0.9	..	..	41	3.2	2	0.2	—	—	1	0.1	2	0.2
2,923	5.6	13	0.0	2	0.0	319	0.6	33	0.1	82	0.2	8	0.0	4	0.0
1,644	6.2	7	0.0	2	0.0	161	0.6	..	..	..	..	..	..	..	..
1,279	4.9	6	—	..	..	158	0.6	33	0.1	82	0.3	8	0.0	4	0.0

5-1 Deaths and Death Rates by Cause (ICD-9) (7)

	Year	Sex	392,393,399		40,41		42		43		440	
			Other Direct Obstetric Causes		All Other Indirect Obstetric Causes		Diseases of Skin and Subcutaneous Tissue		Diseases of Musculoskeletal System and Connective Tissue		Spina Bifida and Hydrocephalus	
			Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
INDONESIA	1986	T	557	0.33	6 4	0.04	110	0.07	54	0.03	54	0.03
		M	..	..	..	..	64	0.08	27	0.03	27	0.03
		F	557	0.66	64	0.08	46	0.05	27	0.03	27	0.03
JAPAN	1986	T	14	0.0	36	0.0	679	0.6	3,191	2.6	82	0.1
		M	..	..	..	..	251	0.4	795	1.3	38	0.1
		F	14	0.0	36	0.1	428	0.7	2,396	3.9	44	0.1
MALAYSIA Peninsular Malaysia Sabah Sarawak	1986	T	16	0.12	9	0.07	1	0.01	30	0.23	26	0.20
		T	5	0.39	2	0.16	6	0.47	3	0.24	7	0.55
		T	1	0.07	—	—	5	0.33	4	0.26	3	0.20
PHILIPPINES	1984	T					461	0.9	585	1.1		
		M					271	1.0	346	1.3		
		F					190	0.7	239	0.9		
SINGAPORE	1986	T	—	—	—	—	68	2.6	50	1.9	4	0.2
		M	..	..	..	..	28	2.1	10	0.8	2	0.2
		F	—	—	—	—	40	3.2	40	3.2	2	0.2
THAILAND	1986	T	204	0.4	2	0.0	75	0.1	73	0.1	9	0.0
		M	..	..	..	..	42	0.2	46	0.2	4	0.0
		F	204	0.8	2	0.0	31	0.1	27	0.1	5	0.0

(per 100,000 population)

442	441,443-447, 449	453	450-452,454, 455,459	465	460-464,466, 467,469	E47-E53	E471
Congenital Anomalies of Heart and Circulatory System	Other Congenital Anomalies	Birth Trauma	Other Conditions Originating in the Perinatal Period	Senility without Mention of Psychosis	Signs, Symptoms and Other Ill-defined Conditions	Accidents and Adverse Effects	Motor Vehicle Traffic Accidents
Number Rate	Number Rate	Number Rate	Number Rate	Number Rate	Number Rate	Number Rate	Number Rate
137 0.08	219 0.13	64 0.04	4,052 2.40	— —	2,217 1.31	685 0.41	2,062 1.22
73 0.09	137 0.16	55 0.07	2,309 2.70	— —	1,241 1.48	429 0.51	1,533 1.82
64 0.08	82 0.10	9 0.01	1,743 2.06	— —	976 1.15	256 0.30	529 0.62
2,313 0.9	1,589 1.3	290 0.2	2,570 2.1	26,810 22.2	3,348 2.8	57,825 47.8	12,458 10.3
1,221 2.1	808 1.4	170 0.3	1,466 2.5	9,129 15.4	1,939 2.8	39,321 66.2	9,275 15.6
1,092 1.8	781 1.3	120 0.2	1,104 1.8	17,681 28.8	1,409 2.3	18,504 30.1	3,183 5.2
191 1.43	272 2.04	19 0.14	1,943 14.58	58 0.44	491 3.69	2,210 16.59	1,430 10.73
26 2.05	31 2.44	2 0.16	430 33.83	11 0.81	55 4.33	214 16.84	74 5.82
8 0.53	9 0.07	5 0.33	208 13.74	4 0.26	126 8.32	182 12.02	63 4.16
		63 0.1		13,043 24.5	18,173 35.2		1,949 3.7
		36 0.1		5,812 21.8	11,747 44.0		1,373 5.1
		27 0.1		7,231 27.3	6,966 26.3		576 2.2
101 3.9	97 3.8	10 0.4	118 4.6	140 5.4	112 4.3	488 18.9	265 10.2
56 4.3	50 3.8	3 0.2	69 5.2	50 3.8	67 5.1	389 29.5	220 16.7
45 3.5	46 3.6	7 0.6	49 3.9	90 7.1	45 3.5	99 7.8	45 3.5
551 1.0	239 0.5	1 0.0	2,033 3.9	60,231 114.4	50,229 95.4	13,034 24.8	4,208 8.0
297 1.1	139 0.5	1 0.0	1,189 4.5	28,300 107.3	28,789 109.2	9,696 36.8	3,261 12.4
254 1.0	100 0.4	— —	844 3.2	31,931 121.5	21,440 81.5	3,338 12.7	947 3.6

5-1 Deaths and Death Rates by Cause (ICD-9) (8)

	Year	Sex	E470,E472-E474, E479		E48		E50		E51		E521	
			Other Transport Accidents		Accidental Poisoning		Accidental Falls		Accidents Caused by Fire and Flames		Accidental Drowning and Submersion	
			Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
INDONESIA	1986	T	82	0.05	201	0.12	137	0.08	9	0.01	18	0.01
		M	55	0.07	128	0.15	119	0.14	9	0.01	9	0.01
		F	27	0.03	73	0.09	18	0.02	—	—	9	0.01
JAPAN	1985	T	1,130	0.9	787	0.7	3,951	3.3	1,327	1.1	3,001	2.5
		M	921	1.5	506	0.9	2,554	4.3	808	1.4	2,072	3.5
		F	209	0.3	281	0.5	1,397	2.3	519	0.8	929	1.5
MALAYSIA Peninsular Malaysia Sabah Sarawak	1986	T	11	0.08	243	1.82	120	0.90	80	0.60	7	0.05
		T	2	0.16	36	2.83	23	1.81	13	1.02	3	0.24
		T	46	3.04	—	—	5	0.33	—	—	—	—
PHILIPPINES	1984	T	2	0.004	56	0.1	448	0.8	73	0.1	1,758	3.3
		M	1	0.003	31	0.1	353	1.3	36	0.1	1,169	4.4
		F	1	0.003	25	0.09	95	0.4	37	0.1	589	2.2
SINGAPORE	1986	T	9	0.3	8	0.3	77	3.0	5	0.2	—	—
		M	8	0.6	7	0.5	60	4.6	3	0.2	—	—
		F	1	0.1	1	0.1	17	1.3	2	0.2	—	—
THAILAND	1986	T	168	0.3	180	0.3	168	0.3	147	0.3	2,406	4.6
		M	130	0.5	112	0.4	133	0.5	84	0.3	1,614	6.1
		F	38	0.1	68	0.3	35	0.1	63	0.2	792	3.0

(per 100,000 population)

E523		E524		E49,E520,E522, E529		E53		E54		E55		E56	
Accidents Caused by Machinery and by Cutting and Piercing Instruments		Accidents Caused by Firearm Missile		All Other Accidents, Including Late Effects		Drugs, Medicaments Causing Adverse Effects in Therapeutic Use		Suicide and Self-inflicted Injury		Homicide and Injury Purposely Inflicted by Other Persons		Other Violence	
Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
36	0.02	—	—	821	0.49	—	—	108	0.06	9	0.01	—	—
27	0.03	—	—	593	0.71	—	—	72	0.08	9	0.01	—	—
9	0.01	—	—	228	0.27	—	—	36	0.04	—	—	—	—
830	0.7	9	0.0	5,084	4.2	33	0.0	25,667	21.2	1,029	0.9	2,397	2.0
766	1.3	9	0.0	3,550	6.0	19	0.0	16,499	27.8	622	1.0	1,653	2.8
64	0.1	0	0.0	1,534	2.5	14	0.0	9,168	14.9	407	0.7	744	1.2
10	0.08	2	0.02	114	0.86	5	0.04	223	1.67	36	0.27	36	0.27
—	—	—	—	35	2.75	—	—	26	2.05	8	0.63	1	0.08
2	0.13	—	—	19	1.26	2	0.13	47	3.10	1	1.07	3	0.20
						417 ^{g)}	0.8	97	0.2	81	0.2		
						311	1.2	61	0.2	73	0.3		
						106	0.4	36	0.1	8	0.03		
—	—	—	—	124	4.8	—	—	329	12.7	61	2.4	147 ^{h)}	5.7
—	—	—	—	91	6.9	—	—	193	14.7	41	3.1	119	9.0
—	—	—	—	33	2.6	—	—	136	10.7	20	1.6	27	2.1
12	0.0	65	0.1	5,635	10.7	13	0.0	2,878	5.5	5,425	10.3	44	0.1
11	0.0	56	0.2	4,262	16.2	5	0.0	1,815	6.9	4,720	17.9	30	0.1
1	0.0	9	0.0	1,373	5.2	8	0.0	1,063	4.0	705	2.7	14	0.1

6-1 Number of Cases of Infections

	Year	Sex	Cholera	Typhoid Fever and Paratyphoid Fever	Typhoid Fever	Paratyphoid Fever	Amoebiasis and Bacillary Dysentery	Amoebiasis
INDONESIA ⁽¹⁾	1986	T	28,297 ^{a)}	24,807 ^{b)}				
JAPAN ^{(2) (3)}	1986	T	26	221	184	37	1,303	130
		M	21	130	108	22	779	109
		F	5	91	76	15	524	21
MALAYSIA ⁽⁴⁾		T	54	2,845				
Peninsular Malaysia	1986	T	13	1,875				
Sabah		T	31	406				
Sarawak		T	10	564				
PHILIPPINES ⁽⁵⁾	1984	T	1,081	10,073 ^{e)}				
		M	680	6,034				
		F	401	4,039				
SINGAPORE ⁽⁶⁾	1986	T	27	158	150	8		
		M	16	96	92	4		
		F	11	62	58	4		
THAILAND ⁽⁷⁾	1985	T	899	7,574	7,489	85	13,193	2,597

Source: (1) Directorate General of CDC, Ministry of Health 1986
(2) *Statistics of Communicable Diseases, Japan 1986*
(3) *Statistics of Food Poisoning, Japan 1986*
(4) Health Division, Ministry of Health
(5) *1984 Philippine Health Statistics*, Department of Health
(6) Ministry of Environment and Ministry of Health
(7) *Weekly Epidemiological Surveillance Record*, Division of Epidemiology, Ministry of Public Health

Note: a) Including suspected cholera
b) Hospital surveillance system
c) Reported unusual event
d) Weekly report
e) Typhoid and paratyphoid fever and other salmonella infection
f) Viral hepatitis

Bacillary Dysentery	Food Poisoning (Bacterial)	Tuber- culosis of All Forms	Leprosy	Diphtheria	Chickenpox	Infectious Hepatitis	Rabies	Malaria	Influenza (Grippe)
	71 ^{c)}		126,221	1,511 ^{b)}		10,833	1,279 ^{d)}	67,608	
1,173 670 503	35,556 19,313 16,243	56,690	43	9 7 2			— — —	54 50 4	14,296
846 516 194 136	1,877 1,377 402 98	9,421 5,065 2,513 1,843	272 169 77 26	28 13 7 8	4,245 2,751 1,494	7,261 6,730 455 76	— — — —	42,710 10,461 31,262 987	
		151,867 80,490 71,377	1,798 1,077 721	1,968 1,114 854	3,409 2,168 1,241	15,320 9,820 5,500		107,485 58,042 49,443	453,926 211,530 242,396
	613	1,760 1,180 580	39 32 7	— — —	4,276 2,299 1,977	730 ^{e)} 537 ^{e)} 193 ^{e)}		180 142 38	
10,596	39,782	22,907	694	762	7,992	17,864	179	122,851	92,180

6-2 Number of Cases of Venereal Diseases

	Year	Sex	Syphilis & Sequelae	Congenital Syphilis	Early Syphilis, Symptomatic	Early Syphilis, Latent	Cardio- vascular Syphilis	Syphilis of Central Nervous System	Late Syphilis, Latent	Other Forms Late Syphilis, with Symptom	Other Syphilis & Not Specified	Gono- coccal Infection	Other Venereal Disease
INDONESIA ⁽¹⁾	1986	T	—								13	1,462	
JAPAN ⁽²⁾	1986	T	2,598	41	1,372	311			211	341	322	9,915	96
		M	1,635	12	960	159			134	169	201	8,490	93
		F	963	29	412	152			77	172	121	1,425	3
MALAYSIA ⁽³⁾ Peninsular Malaysia Sabah Sarawak	1986	T	1,440									5,685	268
		T	1,217									2,369	171
		T	43									1,572	49
		T	180									1,744	48
PHILIPPINES ⁽⁴⁾	1984	T	42									13,806	
		M	23									1,657	
		F	19									12,149	
SINGAPORE ⁽⁵⁾	1986	T	1,098	6	497	260	11	7	316	1	—	6,448	4,662
		M	596	—	323	93	8	7	164	1	—	4,117	3,875
		F	502	6	174	167	3	—	152	—	—	2,331	787
THAILAND ⁽⁶⁾	1985	T			5,418							47,776	18,131

Source: (1) Directorate General of CDC, Ministry of Health, 1986
 (2) *Statistics of Communicable Diseases, Japan, 1986*
 (3) Communicable Disease Control, Health Management and Information Unit, Health Division, Ministry of Health

(4) *1984 Philippine Health Statistics*, Department of Health
 (5) Ministry of Health
 (6) *Weekly Epidemiological Surveillance Record*, Division of Epidemiology, Ministry of Public Health

7-1 Seasonal Distribution of Cholera (Cases)

	Year	Sex	Total	Months or Four-Week Periods												
				Jan. I	Feb. II	Mar. III	Apr. IV	May. V	Jun. VI	Jul. VII	Jul. VIII	Aug. IX	Sept. X	Oct. XI	Nov. XII	Dec. XIII
INDONESIA ⁽¹⁾	1986	T	28,297 ^{a)}	3,115	1,591	1,351	1,663	2,173	2,215	• •	4,942	2,550	3,610	1,574	1,443	2,070
JAPAN ⁽²⁾	1986	T	26	—	1	—	1	—	—	—	4	5	8	2	1	4
		M	21	—	—	—	1	—	—	• •	3	4	6	2	1	3
		F	5	—	—	—	—	—	—	—	1	1	2	—	—	1
MALAYSIA ⁽³⁾	1986	T	54	2	11	7	2	—	2	• •	1	1	14	3	4	7
Peninsular Malaysia		T	13	—	—	—	—	—	2	• •	1	—	3	2	1	4
Sabah		T	31	2	11	7	2	—	—	• •	—	1	3	—	2	3
Sarawak		T	10	—	—	—	—	—	—	• •	—	—	8	1	1	—
PHILIPPINES ⁽⁴⁾	1984	T	867	32	23	32	27	31	39	99	191	147	141	147	118	54
SINGAPORE ⁽⁵⁾	1986	T	27	2	0	0	0	1	4	• •	4	0	2	0	8	6
THAILAND ⁽⁶⁾	1985	T	899	148	139	327	193	85	7	• •	—	—	—	—	—	—

Source: (1) Directorate General of CDC, Ministry of Health, 1986
 (2) *Statistics of Communicable Diseases, Japan, 1986*
 (3) Communicable Disease Control, Health Management and Information Unit, Health Division, Ministry of Health
 (4) *1984 Philippine Health Statistics*, Department of Health

(5) Ministry of Environment
 (6) *Weekly Epidemiological Surveillance Record*, Division of Epidemiology, Ministry of Public Health

Note: a) Including suspected cholera

7-2 Seasonal Distribution of Typhoid Fever (Cases)

			Total	Months or Four-Week Periods													
				Jan. I	Feb. II	Mar. III	Apr. IV	May. V	Jun. VI	VII	Jul. VIII	Aug. IX	Sept. X	Oct. XI	Nov. XII	Dec. XIII	
INDONESIA ^(1) a)	1986	T	24,807	2,299	1,661	1,757	2,206	2,128	2,271	• •	2,631	2,296	2,097	2,221	2,044	1,196	
JAPAN ⁽²⁾	1986	T	184	14	17	15	28	17	24		17	11	20	4	8	9	
		M	108	6	11	9	15	11	13	• •	10	7	12	3	5	6	
		F	76	8	6	6	13	6	11		7	4	8	1	3	3	
MALAYSIA ^(3) b)	1986	T	2,845	189	193	319	372	246	189	• •	329	226	255	206	152	169	
		Peninsular Malaysia	T	1,875	118	155	282	232	155	119	• •	172	132	175	127	98	110
		Sabah	T	406	31	21	13	74	42	38	• •	73	38	25	23	10	18
		Sarawak	T	564	40	17	24	66	49	32	• •	84	56	55	56	44	41
PHILIPPINES ^(4) c)	1984	T	10,073	325	540	461	744	747	875	1,296	934	756	1,006	954	916	519	
SINGAPORE ⁽⁵⁾	1986	T	150	37	13	5	13	0	5	• •	18	16	12	8	14	9	
THAILAND ⁽⁶⁾	1985	T	7,489	511	481	539	524	671	822	• •	909	729	648	575	653	427	

Source: (1) Directorate General of CDC, Ministry of Health, 1986
(2) *Statistics of Communicable Disease, Japan, 1986*
(3) Communicable Disease Control, Health Management and Information Unit, Health Division, Ministry of Health
(4) *1984 Philippine Health Statistics*, Department of Health
(5) Ministry of Environment
(6) *Weekly Epidemiological Surveillance Record*, Division of Epidemiology, Ministry of Public Health

Note: a) Including paratyphoid fever from sentinel area
b) Including paratyphoid fever
c) Including paratyphoid fever and other salmonella infection

7-3 Seasonal Distribution of Paratyphoid Fever (Cases)

	Year	Sex	Total	Months or Four-Week Periods												
				Jan. I	Feb. II	Mar. III	Apr. IV	May. V	Jun. VI	Jul. VII	Aug. VIII	Sept. IX	Oct. X	Nov. XI	Dec. XII	
INDONESIA ^{a)}																
JAPAN ⁽¹⁾	1986	T	37	2	—	2	1	1	1		6	4	10	4	4	2
		M	22	2	—	1	1	1	—	1	2	7	4	2	1	
		F	15	—	—	1	—	—	1	5	2	3	—	2	1	
MALAYSIA ^{a)}																
Peninsular Malaysia																
Sabah																
Sarawak																
PHILIPPINES ^{a)}																
SINGAPORE ⁽²⁾	1986	T	8	0	1	0	2	0	1	· ·	0	0	1	0	1	2
THAILAND ⁽³⁾	1985	T	85	8	5	7	8	8	3	· ·	9	4	5	14	12	2

Source: (1) *Statistics of Communicable Diseases, Japan, 1985*
(2) Ministry of Environment
(3) *Weekly Epidemiological Surveillance Record, Division of Epidemiology, Ministry of Public Health*

Note: a) Included in typhoid fever (7-2)

7-4 Seasonal Distribution of Bacillary Dysentery (Cases)

	Year	Sex	Total	Months or Four-Week Periods												
				Jan. I	Feb. II	Mar. III	Apr. IV	May. V	Jun. VI	Jul. VII	Aug. VIII	Sept. IX	Oct. X	Nov. XI	Dec. XII	Dec. XIII
INDONESIA																
JAPAN ⁽¹⁾	1986	T	1,303	85	153	254	105	85	84		83	143	68	79	87	77
		M	779	48	92	141	72	50	49	..	47	76	42	50	60	112
		F	524	37	61	113	33	35	35		36	67	26	29	27	90
MALAYSIA ^(2) a)																
Peninsular Malaysia	1986	T	846	41	42	84	78	69	62	..	61	73	80	97	90	69
Sabah		T	516	24	34	39	44	40	39	..	39	44	53	50	58	52
Sarawak		T	194	16	6	42	28	23	19	..	6	3	6	10	29	6
		T	136	1	2	3	6	6	4	..	16	26	21	37	3	11
PHILIPPINES																
SINGAPORE																
THAILAND ⁽⁴⁾	1985	T	10,596	728	899	990	1,015	1,241	1,380	..	1,059	584	494	670	806	730

Source: (1) *Statistics of Communicable Diseases, Japan, 1985*
 (2) Communicable Disease Control, Health Management and Information Unit, Health Division, Ministry of Health
 (3) *Weekly Epidemiological Surveillance Record*, Division of Epidemiology, Ministry of Public Health

Note: a) Number of cases by dysentery, all forms

7-5 Seasonal Distribution of Food Poisoning (Cases)

	Year	Sex	Total	Months or Four-Week Periods												
				Jan. I	Feb. II	Mar. III	Apr. IV	May. V	Jun. VI	Jul. VII	Jul. VIII	Aug. IX	Sept. X	Oct. XI	Nov. XII	Dec. XIII
INDONESIA ⁽¹⁾	1986	T	71	—	8	6	13	—	6	· ·	—	—	2	—	36	—
JAPAN ⁽²⁾	1986	T	35,556	1,578	1,400	1,583	918	3,494	3,001	· ·	5,546	4,472	8,467	1,548	1,555	1,994
MALAYSIA ⁽³⁾	1986	T	1,877	120	306	107	62	117	81	· ·	157	119	159	330	91	228
Peninsular Malaysia		T	1,377	85	93	37	39	94	47	· ·	139	99	131	318	81	214
Sabah		T	402	31	213	54	19	20	13	· ·	9	2	18	9	4	10
Sarawak		T	98	4	—	16	4	3	21	· ·	9	18	10	3	6	4
PHILIPPINES																
SINGAPORE ⁽⁴⁾	1986	T	613	30	105	65	26	65	65	· ·	71	61	36	65	17	7
THAILAND ⁽⁵⁾	1985	T	39,782	3,778	3,591	3,802	4,366	4,328	3,770	· ·	3,187	2,643	2,879	2,718	2,566	2,154

Source: (1) Directorate General of CDC, Ministry of Health, 1986

(2) *Statistics of Food Poisoning, Japan 1986*

(3) Communicable Disease Control, Health Management and Information Unit, Health Division, Ministry of Health

(4) Ministry of Environment

(5) *Weekly Epidemiological Surveillance Record*, Division of Epidemiology, Ministry of Public Health

8-1 Notifiable Infectious Diseases

ICD Number		Indonesia 1986 ⁽¹⁾	Japan 1986	Malaysia 1986 ⁽²⁾	Philippines 1985	Singapore 1986	Thailand 1986
001	Cholera	v	v	v	v	v	v
002	Typhoid and Paratyphoid Fevers	v	v	v	v	v	v
003	Other Salmonella Infections		v	v	v		
004	Shigellosis		v	v			
008	Intestinal Infections due to Other Organisms		v				v
010~018	Tuberculosis		v		v	v	v
020	Plague	v	v	v		v	v
022	Anthrax		v				v
030	Leprosy		v	v	v	v	v
032	Diphtheria	v	v	v	v	v	v
033	Whooping Cough		v	v	v		v
034	Streptococcal Sore Throat and Scarlet Fever		v				
036	Meningococcal Infection	v	v				v
037	Tetanus	v	v	v	v		v
045	Acute Poliomyelitis	v	v	v	v	v	v
052	Chickenpox				v	v	v
055	Measles		v	v	v	v	v
060	Yellow Fever	v	v	v		v	v
061	Dengue	v ^{a)}		v	v	v	v
062	Mosquito-borne Viral Encephalitis		v	v		v	v
070	Viral Hepatitis			v	v	v	v
071	Rabies	v	v	v			
072	Mumps						v
076	Trachoma						
081	Other Typhus		v	v			(Scrub Typhus) v
084	Malaria		v	v	v	v	v
087	Relapsing Fever	v	v				

Source: (1) Directorate General of CDC, Ministry of Health, 1986

(2) Communicable Disease Control Information System Manual. Ministry of Health

ICD Number	Indonesia 1986 ⁽¹⁾	Japan 1986	Malaysia 1986 ⁽²⁾	Philippines 1985	Singapore 1986	Thailand 1986
090 Congenital Syphilis	v	v	v ^{b)}	v	v	v
098 Gonococcal Infections	v	v	v	v	v	v
099 Other Venereal Diseases	v ^{c)}	v ^{c)}	v ^{d)}		v ^{e)}	v ^{e)}
100 Leptospirosis						v
102 Yaws						v
120 Schistosomiasis [Bilharziasis]	v	v		v		
125 Filarial Infection and Dracontiasis	v	v ^{f)}	v	v ^{f)}		
487 Influenza	v	v		v		v

Note:

- a) Only hemorrhagic fever
- b) Syphilis, all forms
- c) Chancroid + lymphogranuloma inguinale
- d) Chancroid
- e) All STDs
- f) Only filariasis

9-1 Infectious Diseases Specified by Immunization Program

	Indonesia 1986	Japan 1986	Malaysia 1986	Phillippines 1985	Singapore 1986	Thailand 1986
Cholera				v		v
Diphtheria	v	v	v	v	v	v
Epidemic Typhus	v a)					
Measles	v b)	v	v	v	v	v b)
Mosquito-borne Viral Encephalitis		v				
Plague						
Poliomyelitis	v	v	v	v	v	v
Rubella		v			v	
Tetanus	v	v	v	v	v	v
Tuberculosis (BCG)	v	v	v	v	v	v
Typhoid and Paratyphoid Fever				v		v
Whooping Cough	v	v	v	v	v	v
Yellow Fever	v a)		v c)			

- Note:**
- a) Only on the occasion of outbreak
 - b) In restricted areas
 - c) Required under Institute for Medical Research

10. Explanatory Notes for Vital Statistics

Crude Live-birth Rate= $(B/P) \times 1,000$

Crude Death Rate= $(D/P) \times 1,000$

where B = Number of live-births during a year

D = Number of deaths during a year

P = Population at middle of year

Crude Marriage Rate (CMR) = $(M/P) \times 1,000$

Crude Divorce Rate (CRR) = $(D/P) \times 1,000$

Crude Birth Rate (CBR) = $(B/P) \times 1,000$

General Fertility Rate (GFR) = $(B/F_{15-49}) \times 1,000$

where M = Number of marriages during a year

D = Number of divorces during a year

B = Number of births during a year

P = Population at middle of year

F_{15-49} = Population of women at ages (15-49) at middle of year

Absolute numbers and crude rates per 1,000 live births

Late fetal deaths: Fetal deaths after at least 28 weeks' gestation

Fetal deaths of unknown gestational age are included

Infant deaths: Deaths under one year

Neonatal deaths: Deaths under four weeks

Post-neonatal deaths: Deaths from four weeks to under one year

Perinatal deaths: Late fetal deaths and deaths under one week

Maternal Mortality Rate is computed as the ratio of maternal deaths in a year to 100,000 live births of the same year

Maternal Mortality Rate = $(D_p/B) \times 100,000$

where D_p = Deaths due to puerperal causes

B = Number of live-births during a year

10-1 Crude Live-birth Rates

(per 1,000 population)

Year	1970	1975	1980	1982	1983	1984	1985	1986
INDONESIA	43.8	40.2 ^{a)}	35.4	34.3	33.7	33.2 ^{b)}	32.7 ^{b)}	32.2 ^{b)}
JAPAN ⁽¹⁾	18.8	17.1	13.6	12.8	12.7	12.5	11.9	11.4
MALAYSIA						31.3 ⁽⁴⁾	31.7 ⁽⁵⁾	
Peninsular Malaysia	33.9	31.3	30.3	30.6	29.8	30.7	31.3	
Sabah	37.9	35.4	38.7 ⁽²⁾	42.5 ^{c)}	39.1 ⁽³⁾	41.7	39.8	
Sarawak	30.4	29.7	29.4	28.0 ^{c)}	27.0 ⁽³⁾	27.6	28.4	
PHILIPPINES ⁽⁶⁾	27.4 ⁽⁷⁾	28.3 ⁽⁷⁾	33.6	33.2	32.9	32.6	32.2	
SINGAPORE	22.1	17.8	17.3	17.3	16.2	16.4	16.6 ⁽⁸⁾	14.8 ⁽⁸⁾
THAILAND ⁽⁹⁾	31.5	27.4	22.8	22.2	21.3	19.0	18.8	18.0

Source: *Demographic Yearbook 1975, 1979, 1981, 1982, UN Population and Vital Statistics Report, 1980, 1981, 1982, 1983, UN*
 (1) *Vital Statistics Japan, 1970-85, Ministry of Health & Welfare*
 (2) *Department of Statistics, Sabah*
 (3) *Vital Statistics, Peninsular Malaysia, Sabah and Sarawak, 1983*
 (4) *Yearbook of Statistics, Malaysia 1985, Department of Statistics*
 (5) *Yearbook of Statistics, Malaysia 1986, Department of Statistics*

(6) National Statistics Office
 (7) *Philippine Health Statistics 1980, Ministry of Health*
 (8) *Monthly Digest of Statistics, July 1987, Department of Statistics*
 (9) *Health Statistics Division, Ministry of Public Health*

Note: a) Estimates for 1970-75 prepared by the Population Division, UN
 b) Calculated by Central Bureau of Statistics 1985, based on National Census 1980
 c) Rate provided by Department of Statistics

10-2 Crude Death Rates

(per 1,000 population)

Year	1970	1975	1980	1982	1983	1984	1985	1986
INDONESIA ⁽¹⁾	18.7	16.7	12.5	12.3	11.7	11.3	11.18	10.87
JAPAN ⁽²⁾	6.9	6.3	6.2	6.0	6.2	6.2	6.3	6.2
MALAYSIA								
Peninsular Malaysia ⁽³⁾	7.3	6.4	5.5 _{a)}	5.2 _{c)}	5.3 ⁽⁴⁾ ₍₄₎	5.1 ⁽⁵⁾ ₍₅₎	5.0 ⁽⁶⁾ ₍₆₎	
Sabah	5.9	4.3	4.2 _{b)}	4.7 _{c)}	4.4 ⁽⁴⁾ ₍₄₎	5.3	5.3	
Sarawak	5.2	5.0	4.2	3.6	3.7 ⁽⁴⁾ ₍₄₎	4.2	4.0	
						3.9	3.6	
PHILIPPINES ⁽⁷⁾	6.7 ⁽⁸⁾	6.4 ⁽⁸⁾	8.7	8.4	8.3	8.1	7.9	
SINGAPORE	5.2	5.1	5.2	5.2	5.3	5.2 ⁽⁹⁾	5.2 ⁽⁹⁾	5.0 ⁽⁹⁾
THAILAND ⁽¹⁰⁾	6.2	5.8	5.3	5.1	5.1	4.5	4.4	4.1

Source: *Demographic Yearbook 1975, 1979, 1981, 1982, UN Population and Vital Statistics Report, 1980, 1981, 1982, 1983, UN*
 (1) Calculated by Health Data Centre, Ministry of Health Based on 1980 Census

- (2) *Vital Statistics Japan, 1970-85, Ministry of Health & Welfare*
 (3) *Vital Statistics, Peninsular Malaysia* (by respective year) Department of Statistics
 (4) *Vital Statistics, Peninsular Malaysia Sabah and Sarawak 1983*
 (5) *Year Book of Statistics, Malaysia 1985, Department of Statistics*
 (6) *Year Book of Statistics, Malaysia 1986, Department of Statistics*

- (7) National Statistics Office
 (8) *Philippine Health Statistics 1980, Ministry of Health*
 (9) *Yearbook of Statistics, Singapore 1986, Department of Statistics*
 (10) Health Statistics Division, Ministry of Public Health

Note:

- a) Rate computed based on the absolute No. 08 deaths obtained from the *Annual Bulletin of Statistics, Sabah 1982*
 b) Rate computed based on the absolute No. 08 deaths obtained from the *Annual Statistical Bulletin, Sarawak 1982*
 c) Rate provided by Department of Statistics, Malaysia (unpublished)

10-3 Vital Statistics Rates

(per 1,000 population)

	Year	Crude Marriage Rates	Crude Divorce Rates	Crude Birth Rates	General Fertility Rates	Crude Death Rates	Infant Mortality Rates
INDONESIA ⁽¹⁾	1986	7.9 ^{a)}	0.8 ^{a)}	32.2	129.9	10.9	84.2
JAPAN ⁽²⁾	1986	5.9	1.37	11.4	45.3	6.2	5.2
MALAYSIA	1985			31.7 ⁽³⁾		5.0 ⁽³⁾	16.54 ⁽³⁾
Peninsular Malaysia			2.1 ^{b)}	31.3	120 ^{c)}	5.3	16.95
Sabah			2.2 ^{b)}	39.8	822 ^{d)}	4.0	17.59
Sarawak			2.3 ^{b)}	28.4	1603 ^{e)}	3.6	11.29
PHILIPPINES ⁽⁴⁾	1984	6.9 ^{f)}	—	27.8	121.9	5.9	38.5
SINGAPORE ⁽⁵⁾	1986	7.8	1.0	14.8	50.2	5.0	9.4
THAILAND ⁽⁶⁾	1986	7.8 ⁽⁷⁾	0.6 ⁽⁷⁾	18.0	82.4	4.1	9.5

Source: (1) Calculated by Central Bureau of Statistics, based on National Census 1980
(2) *Vital Statistics Japan, 1986*, Ministry of Health & Welfare
(3) *Yearbook of Statistics, Malaysia 1986*, Department of Statistics
(4) *Philippine Health Statistics 1980*, Department of Health
(5) *Yearbook of Statistics, Singapore, 1986*, Department of Statistics
(6) Health Statistics Division, Ministry of Public Health
(7) Ministry of Interior, 1984

Note: a) Compiled by Ministry of Religious Affairs, 1986 and Ministry of Internal Affairs, 1986
b) For 1980 : *Social Statistical Bulletin, Malaysia 1981*
c) Rate computed based on No. 08 live birth and No. 08 women age from the *Vital Statistics, Malaysia 1982*
d) For 1982 : rate calculated based on the *State Population Report 1980, Sabah*
e) For 1982 : rate calculated based on the *State Population Report 1980, Sarawak*
f) National Statistics Office, 1985

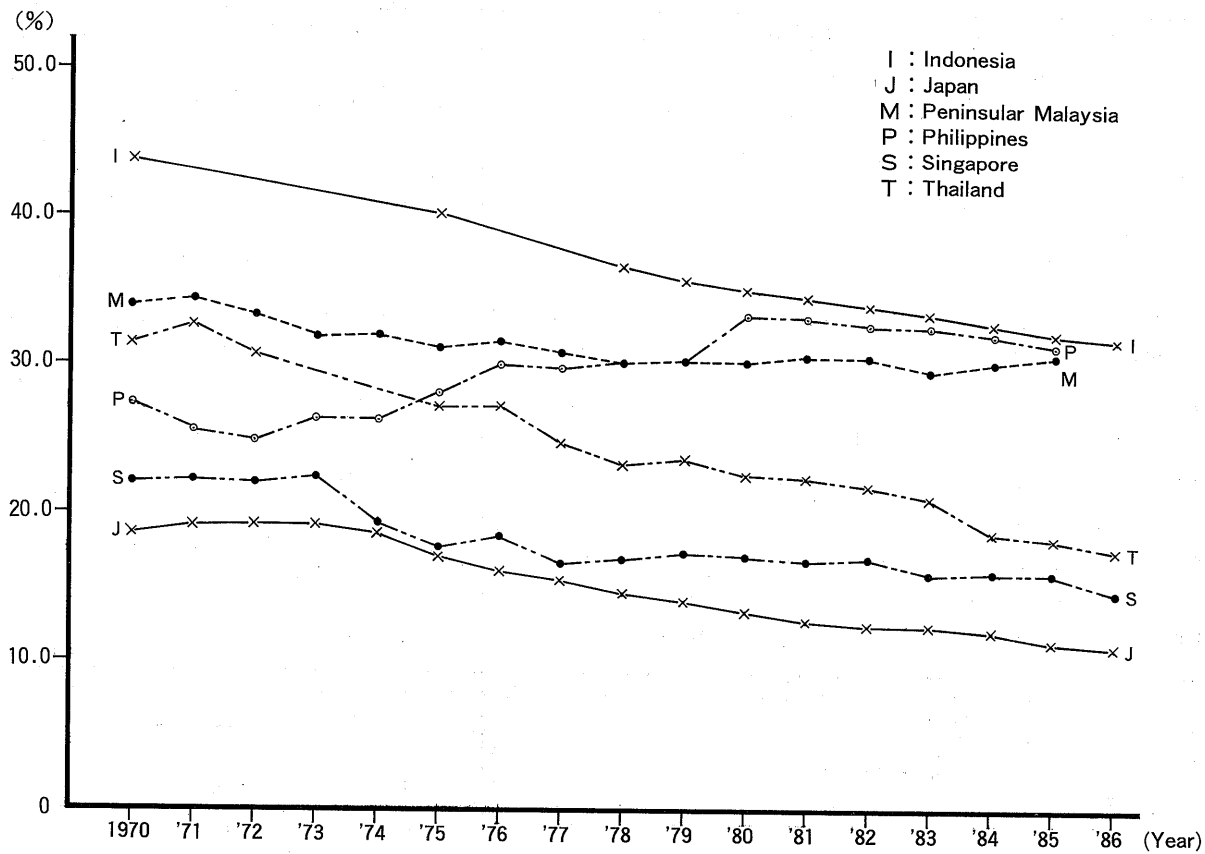
10-4 Natality, Mortality and Natural Increase

	Year	Natality (live-born)				General Mortality				Natural Increase (%)
		Number			(‰)	Number			(‰)	
		Total	Male	Female		Total	Male	Female		
INDONESIA	1986	4,990,314 ^{a)}	—	—						21.4 ^{b)}
JAPAN ⁽¹⁾	1986	1,382,976	711,330	671,646	11.4	750,641	406,954	343,687	6.2	5.2
MALAYSIA ⁽²⁾	1985	479,414	255,020	242,394	31.7	78,628	45,208	33,420	5.0	26.7
Peninsular Malaysia ⁽³⁾		406,806	208,422	198,384	31.3	68,367	38,923	29,444	5.3	26.1
Sabah		48,609	24,918	23,691	39.8	4,949	3,074	1,875	4.0	35.7
Sarawak		41,999	21,680	20,319	28.4	5,312	3,211	2,101	3.6	24.8
PHILIPPINES ⁽⁴⁾	1984	1,478,205	772,007	706,198	27.8	313,359	186,148	127,211	5.9	21.9
SINGAPORE ⁽⁵⁾	1986	38,379	19,927	18,447	14.8	12,821	7,294	5,525	5.0	9.9
THAILAND ⁽⁶⁾	1986	948,304	482,709	462,595	18.0	218,025	125,086	92,938	4.4	13.9

Source: (1) *Vital Statistics Japan 1986*, Ministry of Health & Welfare
(2) *Vital Statistics, Peninsular Malaysia, Sabah and Sarawak 1985*
(3) *Vital Statistics Peninsular Malaysia 1984*
(4) *Philippine Health Statistics 1984*, Department of Health
(5) *Monthly Digest of Statistics*, July 1987, Department of Statistics
(6) Health Statistics Division, Ministry of Public Health

Note: Figures for males and females may not add up to the total on account of unknown sex
a) Proceedings Seminar and Workshop on Research and Program Strategies for Intending the Reduction of Infant and Child Mortality in Indonesia,
b) Calculated by Central Bureau of Statistics, 1985, based on National Census 1980

Fig.3 Annual Change of Crude Live-birth Rate (per 1,000)



11-1 Late Fetal, Infant, Neonatal, Post-neonatal and Perinatal Mortality

	Year	Late Fetal Mortality		Infant Mortality		Neonatal Mortality		Post-neonatal Mortality		Perinatal Mortality	
		Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
INDONESIA ⁽¹⁾	1986	—	—	—	84.2	—	—	—	—	—	45.0
JAPAN ⁽²⁾	1986	6,910	5.0	7,251	5.2	4,296	3.1	3,246	2.3	10,156	7.3
MALAYSIA ⁽³⁾	1984										
Peninsular Malaysia				6,896	17.0	4,333	10.7	2,563	6.3	7,957	20.0
Sabah				855	17.6	566	11.6	289	6.0	731	15.0
Sarawak				474	11.3	316	7.5	158	3.8	357	8.5
PHILIPPINES ⁽⁴⁾	1984	3,623	2.5	56,897	38.5	28,313	19.3	37,851	25.8	23,899	16.2
SINGAPORE ⁽⁵⁾	1986	201	5.2	359	9.4	248	6.5	111	2.9	394	10.3
THAILAND ^(6) a)	1986			8,990	9.5	3,452	3.6	5,538	5.9	3,028 ^{b)}	3.2

Source: (1) Calculated by Central Bureau of Statistics based on National Census, 1980
 (2) *Vital Statistics Japan 1986*, Ministry of Health & Welfare
 (3) *Vital Statistics Peninsular Malaysia, Sabah and Sarawak 1985*, Department of Statistics
 (4) *1984 Philippine Health Statistics*, Department of Health
 (5) *Singapore Demographic Bulletin*, June 1987, Department of Statistics
 (6) Health Statistics Division, Ministry of Public Health

Note: a) In 1984, the vital registration system of the whole country has been revised for improvement while the registration of still birth was not emphasized for practices. So the still birth data was incomplete and not valid enough to be presented in the vital statistics.
 b) Since 1984, as mentioned earlier about the abolishment of the registration of still birth, so the data on that particular item included perinatal deaths cannot be gathered completely, because the figures can only be collected from the hospitals.

11-2 Infant Mortality by Age and Sex

	Year	Sex	Number						Rate (per 1,000 live births)					
			Total	1 day	2-6	7-27	28-365	Unknown	Total	1 day	2-6	7-27	28-365	Unknown
INDONESIA														
JAPAN ⁽¹⁾	1985	T M F	7,252 4,332 3,567	3,737		1,173	2,989	—	5.5 5.8 5.1	2.6		0.8	2.1	
MALAYSIA Peninsular Malaysia ⁽²⁾	1985	T M F	6,896 3,968 2,928						17.0 19.0 14.5					— — —
Sabah	T M F	855 489 366	17.6 19.6 15.4											
	T M F	474 279 195	11.3 12.9 9.6											
Sarawak	T M F													
PHILIPPINES ⁽³⁾	1984	T M F	56,897 33,391 23,500					—	34.6 39.6 29.3					
SINGAPORE ⁽⁴⁾	1985	T M F	394 224 169	169 99 69	65 37 28	63 39 24	97 49 48	— — —						
THAILAND ⁽⁵⁾	1986	T M F	8,990 5,156 3,834	1,217 660 557	1,062 659 403	1,173 696 477	4,869 2,774 2,095	669 367 302	9.5 10.7 8.3	1.3 1.4 1.2	1.1 1.4 0.9	1.2 1.4 1.0	5.2 5.7 4.5	0.7 0.8 0.6

Source: (1) *Vital Statistics Japan 1985*, Ministry of Health and Welfare(2) *Vital Statistics, Peninsular Malaysia, Sabah and Sarawak 1985*, Department of Statistics, Malaysia(3) *1984 Philippine Health Statistics*, Department of Health(4) *Report on Registration of Births and Deaths, Singapore 1985*

(5) Health Statistics Division, Ministry of Public Health

11-3 Maternal Mortality Rates

(per 100,000 live births)

	1970	1975	1980	1982	1983	1984	1985	1986
INDONESIA								
JAPAN ^(1) a)	50.0	28.7	20.5	18.4	15.4	15.3	15.8	
MALAYSIA ^{b)}								
Peninsular Malaysia ⁽²⁾	148	83	63	50	40 ⁽⁶⁾	39 ⁽⁷⁾	39 ⁽⁷⁾	37 ⁽⁸⁾
Sabah	11	72	107 ⁽⁴⁾	90 ⁽⁴⁾	18 ⁽⁶⁾		20	21
Sarawak ⁽³⁾	90	20	50 ⁽⁵⁾	18 ⁽⁵⁾	20 ⁽⁶⁾		30	10
PHILIPPINES ⁽⁹⁾	190 ⁽¹⁰⁾	140 ⁽¹⁰⁾	110	140	100	90	90	90
SINGAPORE ^(11) c)	32.7	30.0	4.9	11.7	14.8	12.0	4.7	5.2
THAILAND ⁽¹²⁾	226.1	171.7	98.5	69.6	63.5	48.0	41.4	35.4

Source: *Demographic Yearbook 1982, UN*

(1) *Vital Statistics Japan, 1970-85*, Ministry of Health and Welfare

(2) *Monthly Statistical Bulletin, Peninsular Malaysia*, February 1982, Department of Statistics

(3) *Annual Report 1980*, Medical and Health Department, Sarawak

(4) *Annual Report 1982*, Medical and Health Department, Sabah

(5) *Annual Report 1982*, Medical and Health Department, Sarawak

(6) *Vital Statistics, Peninsular Malaysia, Sabah and Sarawak 1983*

(7) *Vital Statistics, Peninsular Malaysia, Sabah and Sarawak 1984*

(8) *Vital Statistics, Peninsular Malaysia, Sabah and Sarawak 1986*

(9) Projections by Department of Health

(10) *Philippine Health Statistics 1980*, Ministry of Health

(11) *Report on the Registration of Births and Deaths*

(12) Health Statistics Division, Ministry of Public Health

Note: a) All data classified by 1965 Revision
b) Medically certified or inspected deaths only
c) Data based on ICD 9, 1975 Revision

12-1 Expectation of Life at Specified Ages for Each Sex

	Year	Sex	Age								
			0	1	2	3	4	5	10	15	20
INDONESIA ⁽¹⁾	1986	M	58.84	62.54	—	—	—	60.29	55.86	51.26	46.85
		F	62.50	65.48	—	—	—	63.17	58.72	54.11	49.64
JAPAN ⁽²⁾	1986	M	75.23	74.65	73.72	72.76	71.79	70.81	65.89	60.96	56.15
		F	80.93	80.32	79.37	78.41	77.43	76.45	71.50	66.54	61.62
MALAYSIA	1985	M	67.93	68.28				64.67	59.89	55.06	50.42
Peninsular Malaysia ⁽³⁾		F	72.95	73.07				69.45	64.64	59.79	54.97
Sabah											
Sarawak											
PHILIPPINES ⁽⁴⁾	1986	M	61.6	64.6	64.2	63.5	62.7	61.9	57.4	52.7	48.2
		F	65.2	67.6	67.2	66.4	65.6	64.8	60.2	55.5	51.0
SINGAPORE ⁽⁵⁾	1985	M	70.3	70.0				66.1	61.2	56.3	51.5
		F	75.7	75.3				71.5	66.5	61.6	56.7
THAILAND ⁽⁶⁾	1985-1990	M	61.75								
		F	67.50								

Source: *Demographic Yearbook 1982*, UN

(1) Calculated by Centre for Health Data, using model life table for developing countries, UN, 1982

(2) *Abridged Life Table 1986*, Ministry of Health & Welfare, Japan

(3) Data provided by Department of Statistics, Malaysia

(4) National Statistics Office, Manila, calculated by interpolation using west model life table

(5) *Abridged Life Table 1985*, Ministry of Health(6) *Report of Working Group on Population Projection*, Office of National Economic and Social Development Board, 1985Note: a) 80 & over
b) 85 & above

Age													
25	30	35	40	45	50	55	60	65	70	75	80	85	90+
42.61 45.30	38.35 40.90	34.10 36.71	29.90 32.47	25.83 28.29	21.93 24.20	18.27 20.28	14.89 16.56	11.84 13.15	9.15 10.10	6.83 7.50	4.87 5.32	-- --	-- --
51.37 56.72	46.56 51.84	41.76 46.96	37.02 42.13	32.40 37.37	27.93 32.68	23.72 28.10	19.70 23.62	15.86 19.29	12.33 15.19	9.24 11.45	6.72 8.25	4.80 5.70	3.38 3.78
45.86 50.17	41.29 45.40	36.67 40.67	32.12 35.98	27.72 31.42	23.49 26.96	19.63 22.79	16.15 18.85	13.19 15.44	10.49 12.30	8.76 10.13	7.21 ^{a)} 8.30 ^{a)}		
43.8 46.5	39.4 42.1	35.1 37.7	30.8 33.3	26.6 29.0	22.5 24.8	18.8 20.8	15.3 17.0	12.2 13.5	9.4 10.4	7.0 7.7	5.0 5.5		
46.8 51.9	42.1 47.0	37.4 42.2	32.7 37.4	28.2 32.7	23.8 28.1	19.8 23.8	16.3 19.7	13.0 15.9	10.3 12.5	7.9 9.5	6.0 6.8	4.2 ^{b)} 4.5 ^{b)}	

12-2 Survivors at Specified Ages for Each Sex

	Year	Sex	Age							
			0	1	5	10	15	20	25	30
INDONESIA ⁽¹⁾	1986	M	100,000	92,570	90,001	89,112	88,447	87,391	85,917	84,379
		F	100,000	93,996	91,571	90,762	90,136	89,211	87,988	86,585
JAPAN ⁽²⁾	1986	M	100,000	99,439	99,214	99,100	99,003	98,668	98,272	97,893
		F	100,000	99,520	99,358	99,289	99,228	99,108	98,937	98,732
MALAYSIA ⁽³⁾	1979	M	100,000	97,062	96,116	95,621	95,272	94,736	94,620	93,234
		F	100,000	97,716	96,812	96,430	96,152	95,796	95,325	94,813
PHILIPPINES ⁽⁴⁾	1986	M	100,000	93,882	92,002	91,285	90,741	89,842	88,588	87,293
		F	100,000	95,083	93,325	92,698	92,212	91,471	90,475	89,316
SINGAPORE ⁽⁵⁾	1985	M	100,000	99,068	98,856	98,713	98,555	98,127	97,583	96,978
		F	100,000	99,183	99,008	98,906	98,8.5	98,607	98,362	98,077
THAILAND										

Source: (1) Calculated by Centre for Health Data, using model life table for developing countries
 (2) *Abridged Life Table 1986*, Ministry of Health & Welfare
 (3) *Vital Statistics, Peninsular Malaysia 1979*, Department of Statistics
 (4) Calculated by interpolation using west life table, National Statistics Office
 (5) *Abridged Life Table 1985*, Ministry of Health

Note: a) 85 & above

Age											
35	40	45	50	55	60	65	70	75	80	85	90+
82,663 84,988	80,602 83,137	77,956 80,939	74,440 78,183	69,636 74,460	63,159 69,465	54,542 62,405	43,755 52,768	31,158 40,095	18,314 25,602		
97,455 98,480	96,803 98,104	95,752 97,525	94,058 96,645	91,220 95,314	87,174 93,420	81,621 90,509	73,395 85,830	61,354 77,991	44,647 64,705	25,825 45,070	10,535 23,038
92,346 94,116	91,076 93,704	89,174 91,704	86,072 89,851	81,542 87,019	74,667 82,056	65,352 75,072	52,106 64,398	38,565 51,409	- -	- -	
85,846 87,981	84,084 86,399	81,758 84,457	78,537 81,925	73,998 78,436	67,661 73,646	59,044 66,771	47,978 57,104	34,726 44,057	20,861 28,685		
96,347 97,673	95,442 97,154	93,980 96,345	91,652 94,967	87,512 92,622	80,743 88,973	71,475 82,912	59,054 74,153	44,121 61,902	28,087 46,106	14,546 ^{a)} 28,782 ^{a)}	

Fig.4 Survivors at Specified Ages for Each Sex (1)
Japan, 1986

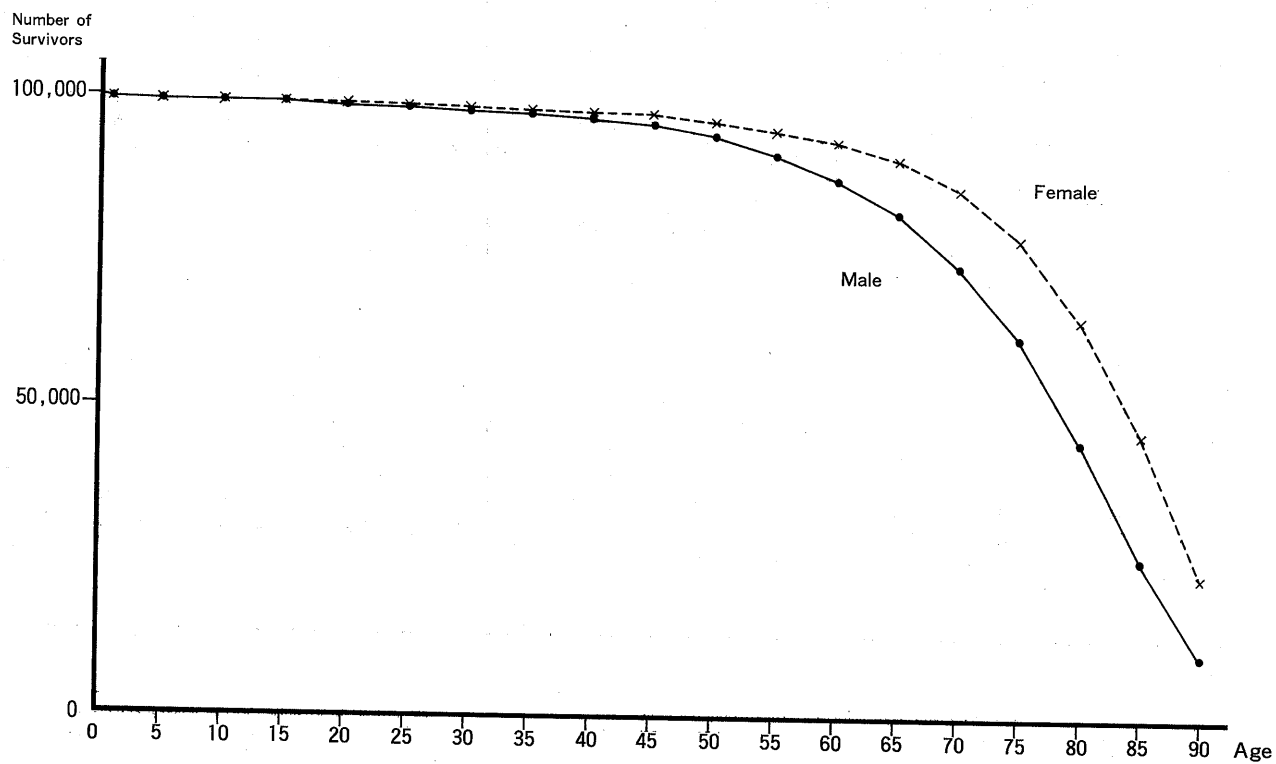


Fig.4 Survivors at Specified Ages for Each Sex (2)
Peninsular Malaysia, 1979

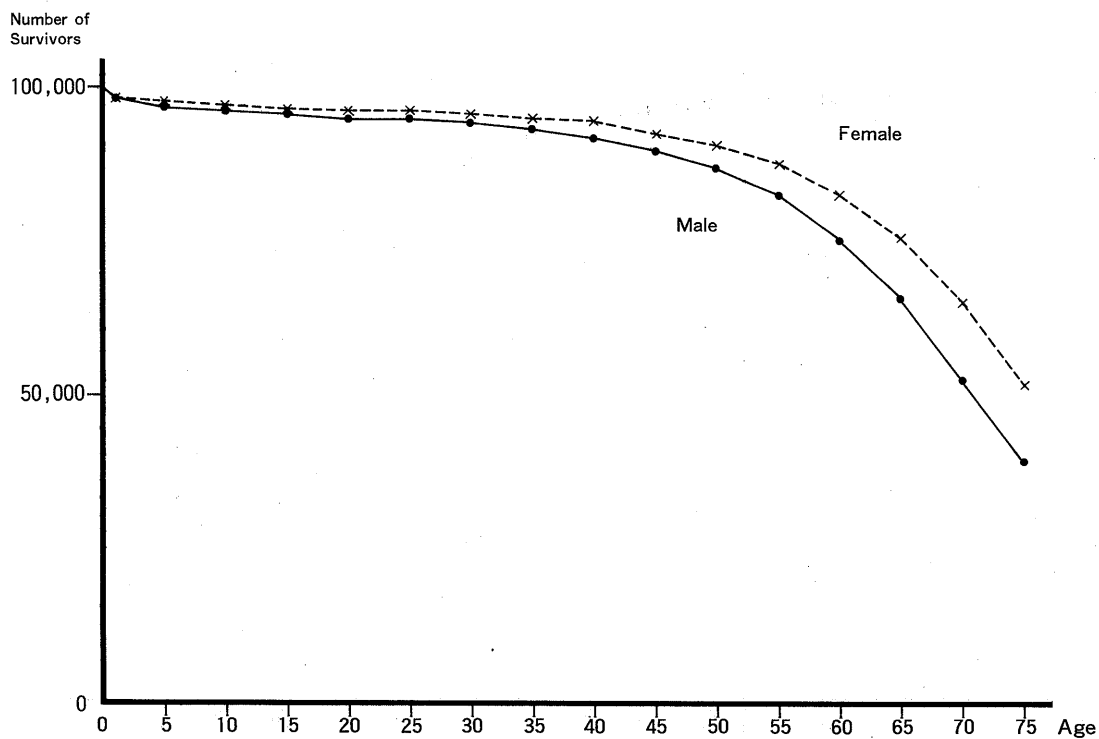


Fig.4 Survivors at Specified Ages for Each Sex (3)
Singapore, 1985

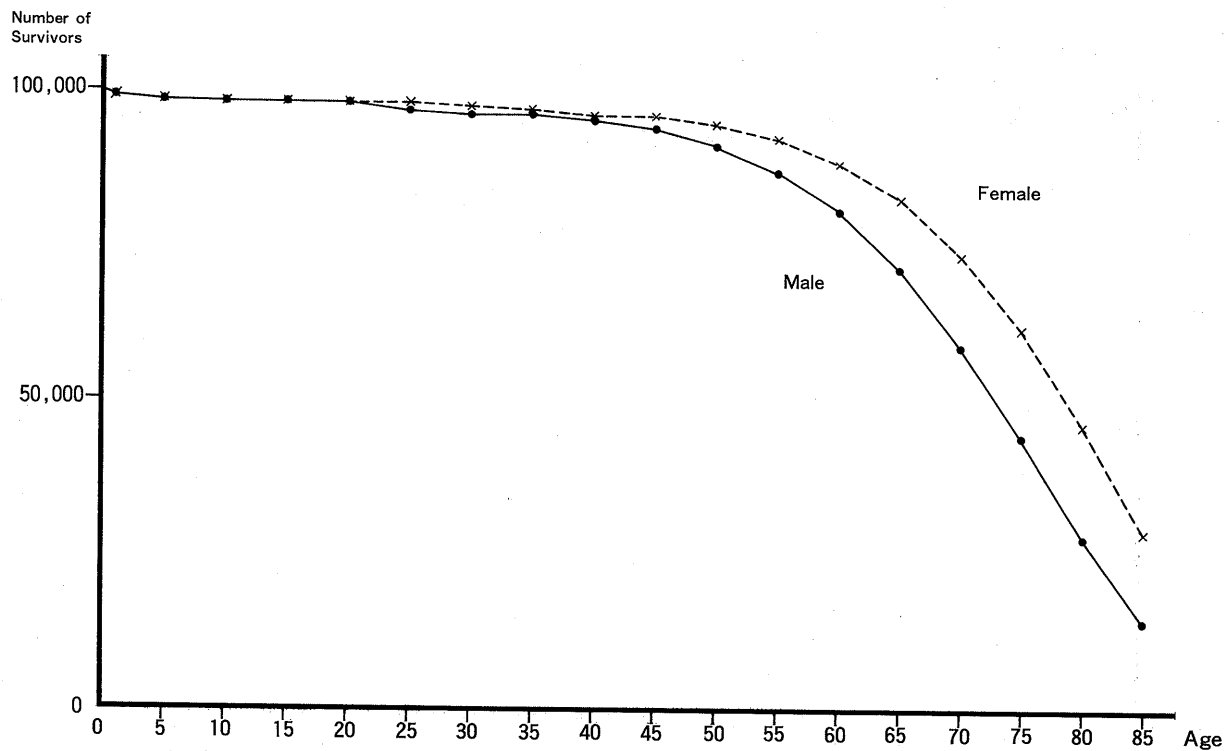


Fig.4 Survivors at Specified Ages for Each Sex (4)
Indonesia, 1986

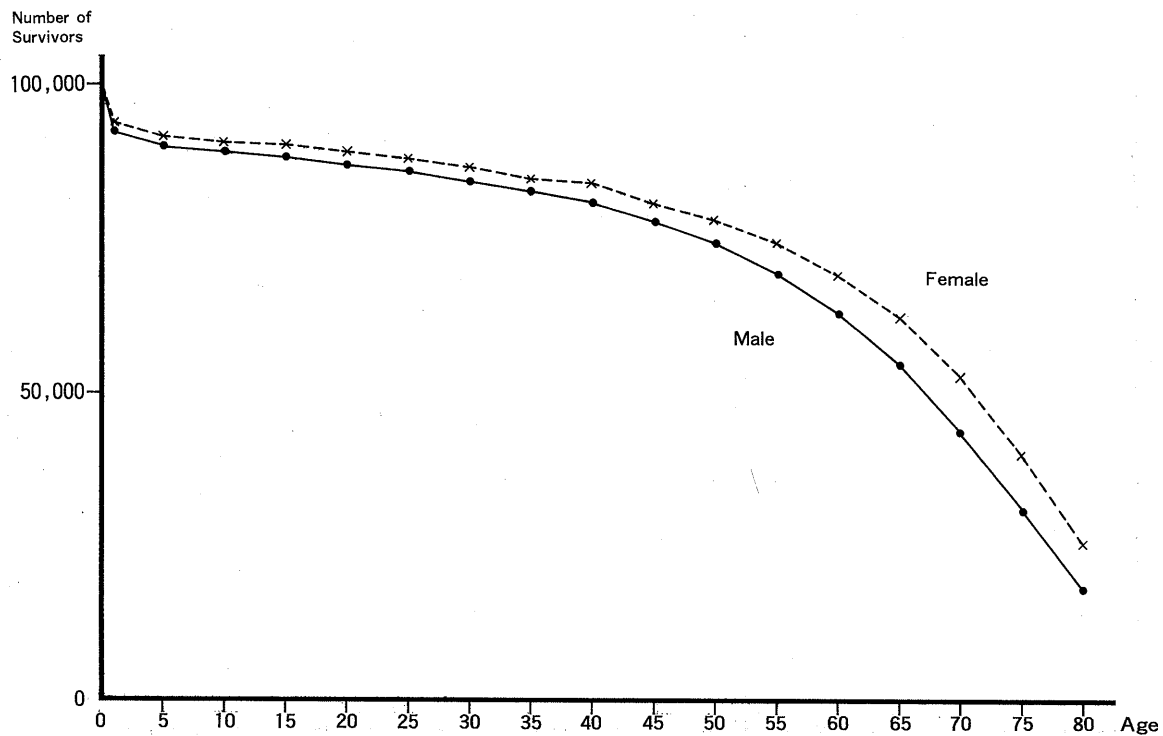


Fig.4 Survivors at Specified Ages for Each Sex (5)
Philippines, 1986

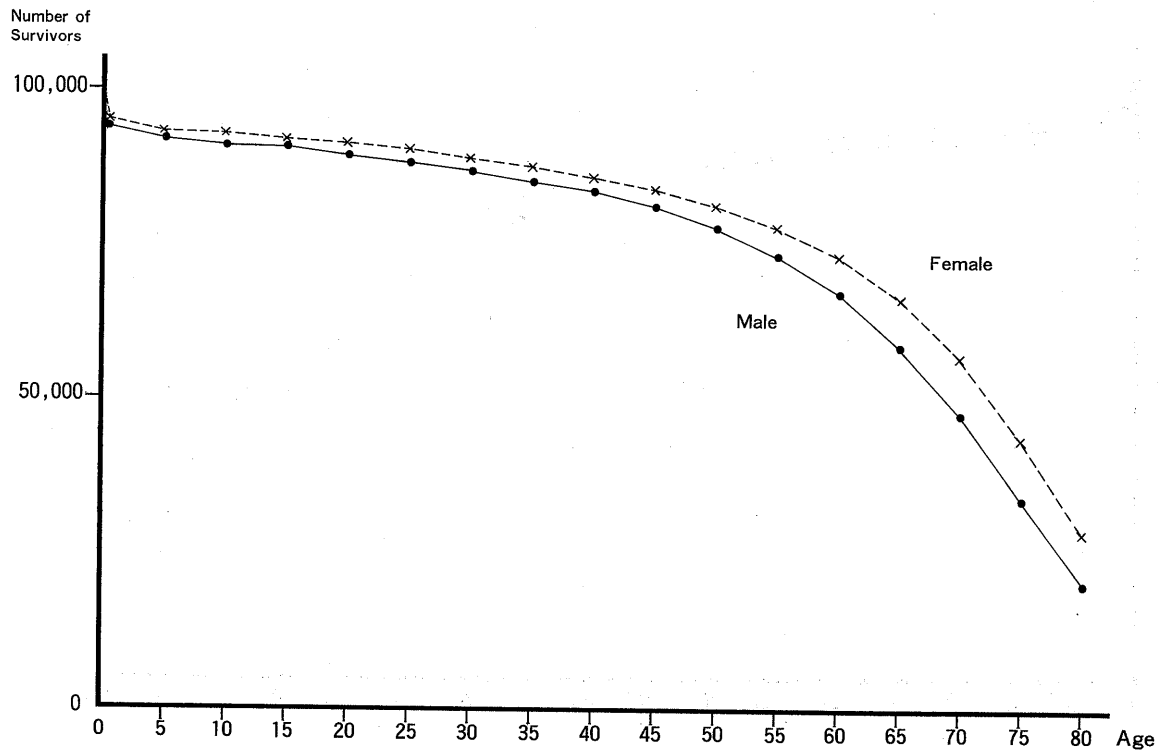
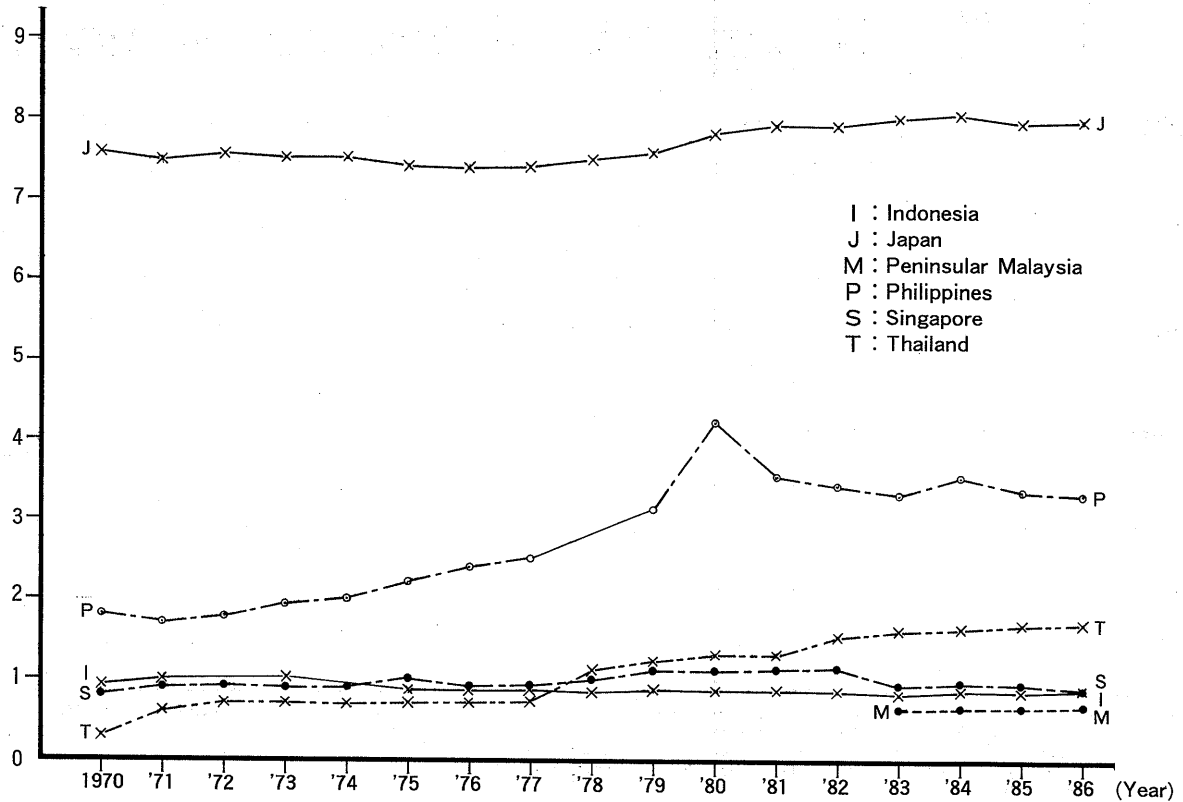


Fig.5 Annual Change of Number of Hospitals (per 100,000)



13-1 Per Capita Food Intake (1)

	Year	Energy (k cal/day)			Protein (g/day)			Fat (g/day)		
		Total	Vegetable Products	Animal Products	Total	Vegetable Products	Animal Products	Total	Vegetable Products	Animal Products
INDONESIA ⁽¹⁾	1984	2,516	2,459	57	52.90	47.30	5.60	47.70	44.30	3.40
JAPAN ⁽²⁾	1985	2,088			79.0	38.9	40.1	56.9	29.3	27.6
MALAYSIA	1977	2,549 ^{a)}	2,195 ^{a)}	354 ^{a)}	57.6	35.7	21.9	45.5	29.2	16.3
PHILIPPINES ⁽³⁾	1981	2,420				54				
SINGAPOR ⁽⁴⁾	1982	1,808	1,607	201	50.6	32.9	17.7	30	20	10
THAILAND	1977	2,098	1,952	146	46.3	32.2	14.1	22.5	13.8	8.7

Source: Food Balance Sheets 1975-77, Average and Per Capita Food Supplies 1961-65, Average 1967 to 1977, FAO, 1980

Note: a) For 1982

(1) Welfare Indonesia 1986, Central Bureau of Statistics

(2) National Nutrition Survey, Health Service Bureau, Ministry of Health and Welfare

(3) Form Actual Food Consumption Surveys (Food weighing technique), Food and Nutrition Research Institute

(4) Food Supplies Analysis, FAO, 1984

13-1 Per Capita Food Intake (2)

(mg/day)

	Year	Calcium	Iron	Vitamin A	Vitamin B 1	Vitamin B 2	Vitamin C
INDONESIA	1983	215.15	10.02	1,096.31 ^{a)}	1.18	—	142.44
JAPAN ⁽²⁾	1985	553	10.7	2,188 ^{a)}	1.34	1.25	128
MALAYSIA	1977	330	13.5	135	0.87	0.79	44
PHILIPPINES	1982	450	16.8		0.74	0.58	61.6
SINGAPOR	1977	656	21.8	269	1.59	1.38	76
THAILAND	1977	243	13.9	73	0.87	0.64	60

Note: a) Unit=i.u.

14-1 Housing Conditions

(%)

	Year		Percentage of Households in Occupied Dwelling Units with Piped Water	Percentage of Households in Occupied Dwelling Units by Type of Toilet Facilities				Lighting			
				Flush/ Water	Pit or Moulded Bucket	Other	None	Electricity	Pressure/ Gas Lamp	Oil Lamp	Other
INDONESIA ⁽¹⁾	1985	Total	10.8	14.9 ⁽²⁾	19.7 ⁽²⁾	65.3 ⁽²⁾	—	30.5	—	68.8	0.8
		Urban	32.4	38.4	17.0	44.6	—	72.8	—	26.9	0.2
		Rural	3.3	6.8	20.7	72.5	—	15.9	—	83.1	0.9
JAPAN ⁽³⁾	1983	Total	94.0	58.5	41.5						
		Urban	95.9	67.0	33.0						
MALAYSIA ⁽⁴⁾ Peninsular Malaysia Sabah Sarawak	1980	Total	65.0	56.4	22.7	4.4	16.5	64.4	8.4	26.5	0.7
		Total	68.0	60.7	21.7	3.6	14.7	68.4	7.3	23.6	0.7
		Total	50.3	32.1	32.9	8.1	26.9	45.0	15.7	28.7	0.6
		Total	47.8	56.4	22.7	4.4	16.5	41.6	13.2	44.5	0.7
PHILIPPINES ⁽⁵⁾	1985	Total	71.4	67.9	16.02		16.09				
		Urban	85.08	79.42	10.27		10.31				
		Rural	60.58	58.78	70.57		20.65				
SINGAPORE ⁽⁶⁾	1986	Total	99.0	95.0	0.1			95.0			
THAILAND ⁽⁷⁾	1980	Total	18.9	4.2	50.3	44.1	1.3	43.0	0.7	54.8	0.2

Source: (1) *Welfare Indicators 1986*, Central Bureau of Statistics

(2) *1985 Inter Censal population Survey*

(3) *1983 Housing Survey of Japan*, Vol. 1, Part 1, Statistics Bureau, March 1985

(4) *Census of Housing, Malaysia 1980 Summary Report*, Department of Statistics Malaysia, July 1982

(5) *Environmental Sanitation*, Department of Health, 1981

(6) Public Utilities Board and Ministry of Environment

(7) *1980 Population & Housing Census*, Whole Kingdom, National Statistical Office

15-1 Mean Length from Birth to One Year

(cm)

	People or Place	Year	Sex	Age					
				Birth	4wks	3mos	6mos	9mos	12mos
INDONESIA ⁽¹⁾	Bogor	1978	M	49.7	53.8	60.4	66.6	70.3	73.3
			F	49.1	52.9	58.9	64.5	68.5	71.9
JAPAN ⁽²⁾	National	1980	M	49.7	56.0	62.7	68.1	72.0	75.5
			F	49.3	55.2	61.1	66.8	70.6	74.1
MALAYSIA									
PHILIPPINES ⁽³⁾	National	1986	M	49.91	53.67	59.74	65.85	69.44	71.68
			F	48.66	52.23	58.08	64.20	68.04	70.59
SINGAPORE ⁽⁴⁾	Malays	1972	M			60.2	65.3		73.6
			F			59.5	64.0		71.5
	Chinese	1972	M			61.8	66.5	71.0	74.5
			F			60.0	65.0	69.5	73.0
THAILAND ⁽⁵⁾	Bangkok		M	50.5 ^{a)}	56.1	62.0	67.8	71.9	73.5
			F	49.9	55.0	60.3	65.9	69.6	72.2

Source: (1) *Indonesian Nutrition*, Vol. X, No.1, 1985

(2) Ministry of Health & Welfare

(3) Food and Nutrition Research Institute

(4) Ministry of Health

(5) *Worldwide Variation in Human Growth*, Cambridge University Press, 1976

Note: a) Data from National Center for Health Statistics of the United States, 1977

15-2 Mean Weight from Birth to One Year

(kgw)

	People or Place	Year	Sex	Age					
				Birth	4wks	3mos	6mos	9mos	12mos
INDONESIA ⁽¹⁾	Bogor	1978	M	3.2	4.2	5.9	7.5	8.4	8.9
			F	3.0	3.9	5.5	6.9	7.7	8.5
JAPAN ⁽²⁾	National	1980	M	3.23	5.08	6.84	8.15	9.04	9.71
			F	3.16	4.76	6.24	7.71	8.47	9.09
MALAYSIA ⁽³⁾	Peninsular Malaysia	1982	T	3.09					
PHILIPPINES ⁽⁴⁾	National	1986	M	3.21	4.21	5.77	7.22	7.93	8.29
			F	2.96	3.87	5.32	6.70	7.43	7.82
SINGAPORE ⁽⁵⁾	Malays	1972	M			6.0	7.2	8.1	8.8
			F			5.5	6.3	7.4	8.0
	Chinese	1972	M			6.5	8.1	8.9	9.2
			F			6.5	8.0	8.8	8.9
THAILAND ⁽⁶⁾	Bangkok		M	3.12	4.65	6.35	7.74	8.62	9.10
			F	3.01	4.46	5.61	7.33	7.97	8.50

Source: (1) *Indonesian Nutrition*, Vol. X, No.1, 1985

(2) Ministry of Health & Welfare, Japan

(3) Ministry of Health

(4) Food and Nutrition Research Institute

(5) Ministry of Health

(6) *Worldwide Variation in Human Growth*, Cambridge University Press, 1976

15-3 Mean Chest Circumference from Birth to One Year

(cm)

	People or Place	Year	Sex	Age					
				Birth	4wks	3mos	6mos	9mos	12mos
INDONESIA ⁽¹⁾	Bogor	1976	T	—	36.3	40.4	43.1	44.5	45.4
JAPAN ⁽²⁾	National	1980	M	32.5	39.1	42.4	44.6	46.1	47.0
			F	32.4	38.2	41.2	43.6	44.9	45.7
MALAYSIA									
PHILIPPINES ⁽³⁾	National	1986	M	34.46	37.75	41.68	43.53	44.07	46.08
			F	34.32	36.75	39.95	42.12	43.22	44.96
SINGAPORE									
THAILAND ⁽⁴⁾	Bangkok		M	32.0	37.9	41.0	43.4	44.7	45.8
			F	31.9	37.5	40.1	42.7	43.5	44.1

Source: (1) *Berita Ilmu Pengetahuan dan Teknologi*, LIPI, 1980
 (2) Ministry of Health & Welfare
 (3) Food and Nutrition Research Institute
 (4) *Worldwide Variation in Human Growth*, Cambridge University Press, 1976

15-4. Mean Height by Age (1-18)

	People or Place	Year	Sex	Age						
				1	2	3	4	5	6	7
INDONESIA ⁽¹⁾	National	1977	M		82.2	88.5	97.2	102.4	107.1	112.1
			F		80.8	88.3	96.2	100.6	106.2	111.5
JAPAN ⁽²⁾	National	1986	M	80.4 ⁽³⁾	89.7 ⁽³⁾	96.7 ⁽³⁾	103.2 ⁽³⁾	110.8	116.5	122.2
			F	78.5 ⁽³⁾	88.2 ⁽³⁾	95.6 ⁽³⁾	102.1 ⁽³⁾	109.9	115.8	121.5
MALAYSIA ⁽⁴⁾	Rural	1960	M						105.4	109.7
			F						109.7	
PHILIPPINES ⁽⁵⁾	National	1986	M	71.68	80.48	87.53	94.05	140.25	106.11	111.22
			F	70.59	79.67	86.66	93.40	99.83	105.54	110.51
SINGAPORE ⁽⁶⁾	National	1983	M						116.2	121.1
			F						115.4	120.5
THAILAND ⁽¹⁾	Bangkok ^{a)} /Ubonratchatani ^{b)}	1984	M	73.5 ⁽⁴⁾	83.8 ⁽⁴⁾	93.5 ⁽⁴⁾	100.5 ⁽⁴⁾	105.0 ⁽⁴⁾	113.5	116.9
			F	72.2	84.0	93.0	99.0	103.5	115.7	116.2

Source: (1) Ohsawa's Laboratory, Otsuma Women's University
 (2) Ministry of Education, Science and Culture
 (3) National Nutrition Survey, 1985, Health Service Bureau, Ministry of Health and Welfare
 (4) *Worldwide Variation in Human Growth*, Cambridge University Press, 1976
 (5) Food and Nutrition Research Institute
 (6) Ministry of Health

Note: a) 1-5 years of age
 b) 6-18 years of age

Age

8	9	10	11	12	13	14	15	16	17	18
118.0 116.1	122.6 121.2	125.2 125.5	129.6 130.8	133.2 136.4	142.7 143.7	147.7 146.1	153.2 149.1	157.8 150.7	159.4 152.4	161.2 151.2
127.7 127.1	132.9 132.8	137.9 138.9	143.6 145.6	150.2 151.0	157.7 154.4	163.9 156.3	167.6 157.1	169.4 157.5	170.3 157.7	169.6 ⁽³⁾ 157.1 ⁽³⁾
111.8 112.8	114.3 117.9	121.9 123.4	129.3 131.8	133.4 137.2	138.4	141.4				
115.90 115.40	120.54 120.65	125.56 125.89	129.43 132.40	134.94 138.19	141.97 143.52	148.95 147.33	154.90 149.56	159.32 150.70	161.75 151.26	162.49 151.53
126.2 125.7	131.1 131.3	135.4 137.3	140.6 143.9	148.2 148.7	156.1 152.4	162.2 154.6	165.5 155.6	166.8 155.4	167.8 155.7	165.8 157.7
123.1 121.1	127.0 127.2	130.9 133.9	137.5 139.5	141.8 148.1	148.9 147.7	155.1 149.4	158.3 150.9	162.4 154.5	163.1 153.6	163.1 153.6

15-5 Mean Weight by Age (1-18)

	People or Place	Year	Sex	Age						
				1	2	3	4	5	6	7
INDONESIA ⁽¹⁾	National	1977	M		10.4	12.1	13.8	15.5	15.7	18.2
			F		10.1	11.6	13.2	14.5	15.7	17.0
JAPAN ⁽²⁾	National	1986	M	11.0 ⁽⁶⁾	12.9 ⁽⁶⁾	14.8 ⁽⁶⁾	16.6 ⁽⁶⁾	19.2	21.2	23.8
			F	10.4 ⁽⁶⁾	12.6 ⁽⁶⁾	14.3 ⁽⁶⁾	16.2 ⁽⁶⁾	18.8	20.8	23.3
MALAYSIA ⁽³⁾	Rural	1960	M						16.4	17.8
			F						16.4	18.6
PHILIPPINES ⁽⁴⁾	National	1986	M	8.29	10.37	11.94	13.61	15.06	16.59	18.21
			F	7.82	9.74	11.54	13.22	14.74	16.20	17.75
SINGAPORE ⁽⁵⁾	National	1983	M						20.6	22.6
			F						19.9	22.4
THAILAND ⁽¹⁾	Bangkok ^{a)} /Ubonratchatani ^{b)}	1984	M	9.1 ⁽³⁾	11.0 ⁽³⁾	13.4 ⁽³⁾	15.1 ⁽³⁾	16.83 ⁽³⁾	18.8	20.4
			F	8.5	10.9	13.0	14.5	16.08	18.0	19.5

Source: (1) Ohsawa's Laboratory, Otsuma Women's University
 (2) Ministry of Education, Science and Culture
 (3) *Worldwide Variation in Human Growth*, Cambridge University Press, 1976
 (4) Food and Nutrition Research Institute
 (5) Ministry of Health
 (6) National Nutrition Survey 1985, Health Service Bureau, Ministry of Health & Welfare

Note: a) 1-5 years of age
 b) 6-18 years of age

Age

8	9	10	11	12	13	14	15	16	17	18
19.9 19.2	21.3 21.6	23.3 23.4	25.7 26.3	27.3 30.3	31.8 33.4	37.1 37.6	40.9 40.4	44.7 43.2	46.9 44.6	48.7 45.9
26.7 26.2	29.7 29.4	33.1 33.3	37.0 38.2	42.2 43.4	47.7 47.1	53.3 50.0	58.3 52.1	60.4 52.8	61.8 52.8	61.1 ⁽⁶⁾ 51.7 ⁽⁶⁾
19.5 18.7	20.7 21.8	24.2 24.0	27.0 28.5	29.5 30.0	32.5	35.3				
19.94 19.52	21.81 21.61	23.82 23.98	25.83 27.07	28.99 31.16	33.24 35.55	38.09 39.29	42.93 42.04	47.09 44.60	49.90 45.33	51.41 46.08
25.3 24.5	28.3 27.4	31.3 31.3	34.4 36.1	39.5 40.0	44.7 43.6	49.4 45.5	52.7 47.0	54.3 47.7	55.9 47.5	54.6 50.2
23.4 21.6	24.8 24.0	25.9 29.4	30.3 31.6	31.1 38.4	37.9 38.4	44.9 40.7	46.7 45.0	51.0 47.8	51.8 47.4	53.0 49.1

16 Definition of the Main Terms Used in the Hospital Statistics (WHO)

Occupation and level of education	Personnel to be included in the data
1. Hospitals	All establishments permanently staffed by at least one physician that can offer inpatient accommodation and provide active medical and nursing care. Establishments providing principally custodial care should not be included.
2. General hospitals (principal)	Hospitals-other than local or rural hospitals-providing medical and nursing care for more than one category of medical discipline (e.g., general medicine, specialized medicine, general surgery, specialized surgery, obstetrics, etc.)
3. Local or rural hospitals	Hospitals, usually in rural areas, permanently staffed by one or more physicians, which in respect of their functions are also general hospitals, but provide medical and nursing care of a more limited range than that provided by principal general hospitals.
4. Medical and maternity centres with beds	Small units, also known as rural health centres, bedded dispensaries, rural maternity homes, etc., not permanently staffed by a physician (but by a medical assistant, nurse, midwife, etc.), which offer inpatient accommodation and provide a limited range of medical and nursing care.
5. Specialized hospitals	Hospitals providing medical and nursing care primarily for only one discipline. This category does not include the specialized department administratively attached to a principal general hospital and sometimes located in an annex or separate building; their beds (and the related data) are included with the principal general hospital.
6. Government hospitals	All hospitals administered by a government authority at any level, whether central, intermediate, or local.

Occupation and level of education	Personnel to be included in the data
7. Private non-profit-making hospitals	All hospitals, whether subsidized by the government or not, operated on a non-profit-making basis by non-government bodies, such as religious missions, industrial enterprises, trusts, or philanthropic institutions.
8. Private profit-making hospitals	All private hospitals (or medical establishments with beds) operated on a profit-making basis.
9. Beds	A hospital bed is one regularly maintained and staffed for the accommodation and fulltime care of a succession of inpatients and is situated in wards or a part of the hospital where continuous medical care for inpatients is provided. The total of such beds constitutes the normally available bed complement of the hospital. Cribs and bassinets main-tained for use by healthy newborn infants who do not require special care should not be included.
10. Admissions	An inpatient admission is the formal admission by a hospital of an inpatient and always involves the allocation of a hospital bed. Healthy babies born in the hospital should not be counted if they do not require special care.
11. Discharges (including deaths)	The number of persons, living or dead, Whose stay has terminated and whose departure has been officially recorded.
12. Patient days	Total of daily censuses of inpatients in the hospitals during the year. Not included in the daily censuses are healthy babies born in the hospitals if they do not require special care. The day of admission and the day of discharge should be counted together as one day.

16-1 Comparative Table of Medical Establishments

	Indonesia (1986)	Japan (1986)	Malaysia (1986)			Philippines (1986)	Singapore (1986)	Thailand (1986)
			Peninsular Malaysia	Sabah	Sarawak			
1 General Hospital	v	v	v	v	v		v	v
2 General & Rural Hospital	v							v
3 Local or Rural Hospital	v		v	v	v			v
4 Medical Center	v					v		v
5 Medical & Maternity Center	v							v
6 Maternity Hospital	v					v	v	v
7 Infectious Diseases Hospital	v	v				v		v
8 Chronic Diseases Hospital							v	
9 Leprosy Hospital	v	v	v		v	v		v
10 Tuberculosis Hospital	v	v	v			v		v
11 Pediatrics Hospital						v	v	v
12 Dermato-Venereology Hospital							v	v
13 Ophthalmology Hospital	v						v	v
14 Orthopedics Hospital	v					v		
15 Mental Hospital	v	v	v	v	v	v	v	v
16 Cancer Hospital	v							v
17 Establ. for Drug Addicts	v					v		v
18 Tropical Diseases Hospital						v		v
19 Other Specialized Hospital	v					v		

16-2 Hospital and Other Medical Establishments with Beds (1)

	Year	1 General Hospitals				2 General and Rural Hospitals				3 Local or Rural Hospitals			
		Establishments	Beds	Admissions or Discharges	Patient-Days	Establishments	Beds	Admissions or Discharges	Patient-Days	Establishments	Beds	Admissions or Discharges	Patient-Days
INDONESIA ⁽¹⁾	1986	703	85,241	2,530,408	16,811,241	298	61,763	1,796,433	12,859,761	405	23,476	733,975	3,951,480
JAPAN	1986	8,613	1,117,700	8,682,985	380,943,505	..				..			
MALAYSIA ^(2) a)	1986	16	13,491	583,795	3,586,490	94	25,953	1,111,004	6,103,895	78	12,462	527,209	2,517,405
Peninsular Malaysia		12	11,601	500,530	3,102,865	64	20,975	895,582	4,880,780	52	9,374	395,052	1,777,915
Sabah		3	1,159	51,016	275,940	15	2,497	106,331	530,710	12	1,338	55,315	254,770
Sarawak		1	731	32,249	207,685	15	2,481	109,091	692,405	14	1,750	76,842	484,720
PHILIPPINES ⁽³⁾	1986									..			
SINGAPORE	1986	14	5,835	243,569	1,406,894	..				..			
THAILAND ⁽⁴⁾	1986	68	16,431			265	43,902			512	10,377		

Source: Ministry of Health in each country

(1) Directorate of Medical Care, Ministry of Health

(2) Information and Documentation System Unit, Ministry of Health

(3) Bureau of Medical Services, Department of Health

(4) Health Statistics Division, Ministry of Public Health

Note:

a) District hospitals

b) Excluding one medical center

c) Special hospitals under Department of Health

4 Medical Centers				5 Medical & Maternity Centers				6 Maternity Hospitals			
Establish- ments	Beds	Admis- sions or Discharges	Patient- Days	Establish- ments	Beds	Admis- sions or Discharges	Patient- Days	Establish- ments	Beds	Admis- sions or Discharges	Patient- Days
3	52	1,083	2,049	—	—	—	—	30	1,771	60,764	239,045
..				..				..			
..				..				..			
8	2,770	108,245 ^{b)}	631,703 ^{c)}					1 ^{c)}	700	36,856	176,396
..				..				1	561	39,700	153,786
4	56			..				7	1,137		

16-2 Hospital and Other Medical Establishments with Beds (2)

	Year	7 Infectious Diseases Hospitals				8 Chronic Diseases Hospitals				9 Leprosy Hospitals			
		Establish-ments	Beds	Admis-sions or Discharges	Patient-Days	Establish-ments	Beds	Admis-sions or Discharges	Patient-Days	Establish-ments	Beds	Admis-sions or Discharges	Patient-Days
INDONESIA	1986	1	78	2,739	12,587	. .				26	3,380	2,331	906,978
JAPAN	1986	13	14,109	* 365	10,585*	. .				16	10,205	0	2,715,965*
MALAYSIA	1986	. .				. .							
Peninsular Malaysia										1	836	1,797	152,570
Sabah										..	..	..	..
Sarawak										1	157	31	35,405
PHILIPPINES	1986	a) 1	900	31,041	165,323	. .				b) 8	5,000	. .	
SINGAPORE	1986	. .	. .	. .	. .	1	425	330	99,398	. .			
THAILAND	1986	2	430			. .				3	2,583		

Note: a) Special hospitals under Department of Health
b) Sanitaria hospital under Department of Health
c) Included under Department of Health Hospitals

10 Tuberculosis Hospitals				11 Pediatrics Hospitals				12 Dermato-Venereology Hospitals			
Establish- ments	Beds	Admis- sions or Discharges	Patient- Days	Establish- ments	Beds	Admis- sions or Discharges	Patient- Days	Establish- ments	Beds	Admis- sions or Discharges	Patient- Days
12	871	7,246	179,169	..				..			
22	51,367	2,555*	598,965*	..				..			
1	276	2,242	66,430	..				..			
..	..	..	..								
..	..	..	..								
1	738	7,556	181,720	c) 1	450	13,516	97,139	..			
..				1	80	168	10,950	1	44	760	7,158
2	686			1	538			1	43		

16-2 Hospital and Other Medical Establishments with Beds (3)

	Year	13 Ophthalmology Hospitals				14 Orthopedics Hospitals				15 Mental Hospitals			
		Establish-ments	Beds	Admis-sions or Discharges	Patient-Days	Establish-ments	Beds	Admis-sions or Discharges	Patient-Days	Establish-ments	Beds	Admis-sions or Discharges	Patient-Days
INDONESIA	1986	5	564	8,170	87,369	1	150	953	49,951	42	7,325	23,994	2,340,396
JAPAN	1986	..				..				1,035	340,506	159,870*	93,642,575*
MALAYSIA	1986	..				..				4	5,738	7,544	1,643,230
Peninsular Malaysia										2	5,098	6,445	1,447,225
Sabah										1	302	421	88,330
Sarawak										1	338	678	107,675
PHILIPPINES	1986	..				a) 1	700	8,083	200,817	a) 1	5,200	4,042	1,443,266
SINGAPORE	1986	1	20	254	1,659	..				3	3,009	6,299	908,223
THAILAND	1986	7	131			..				15	7,314		

Note: a) Special hospitals under Department of Health
b) Hospitals under Department of Health

16 Cancer Hospitals				17 Establ. for Drug Addicts				18 Tropical Diseases Hospitals			
Establish- ments	Beds	Admis- sions or Discharges	Patient- Days	Establish- ments	Beds	Admis- sions or Discharges	Patient- Days	Establish- ments	Beds	Admis- sions or Discharges	Patient- Days
—	—	—	—	a) 1	a) 30	a) 91	a) 2,087		..		
..				..				..			
..				..				..			
..				21	—	1,563	—	b) 1	50	929	8,933
..				..						..	
1	200			2	570			1	213		

16-2 Hospital and Other Medical Establishments with Beds (4)

	Year	19 Other Specialized Hospitals				20 Total			
		Establish- ments	Beds	Admis- sions or Discharges	Patient- Days	Establish- ments	Beds	Admis- sions or Discharges	Patient- Days
INDONESIA	1986	3	52	1,083	2,083	1,408	111,300	2,921,113	21,731,039
JAPAN	1986					9,699	1,533,887	8,846,140 *	477,311,230 *
MALAYSIA	1986					101	32,960	1,122,618	8,001,530
Peninsular Malaysia						68	27,185	906,066	6,547,005
Sabah						16	2,799	106,752	619,040
Sarawak						17	2,976	109,800	835,485
PHILIPPINES	1986	3	603	17,885	135,223	48	17,111	229,686	3,040,520
SINGAPORE	1986					22	9,974	291,080	2,588,068
THAILAND	1986					891	84,614		

Fig.6 Annual Change of Number of Beds (per 100,000)

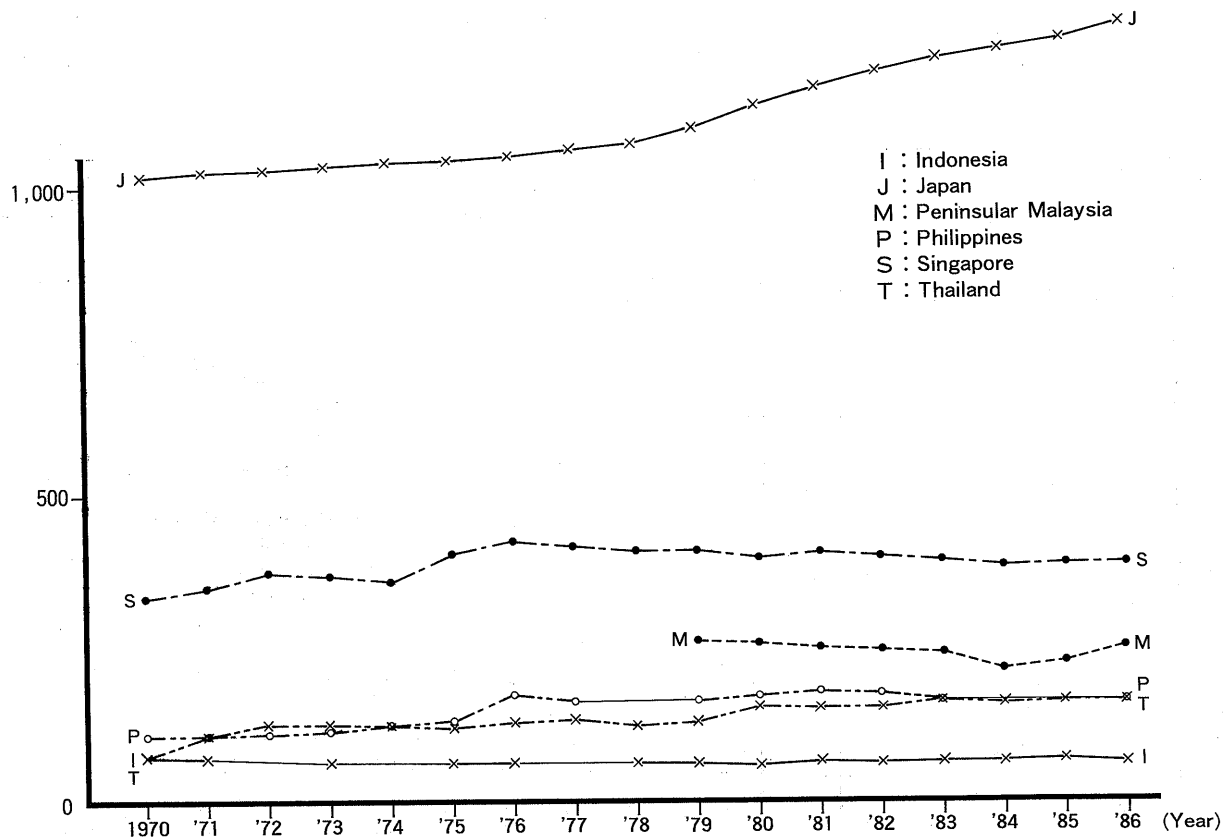


Fig.7 Annual Change of Number of Physicians (per 100,000)

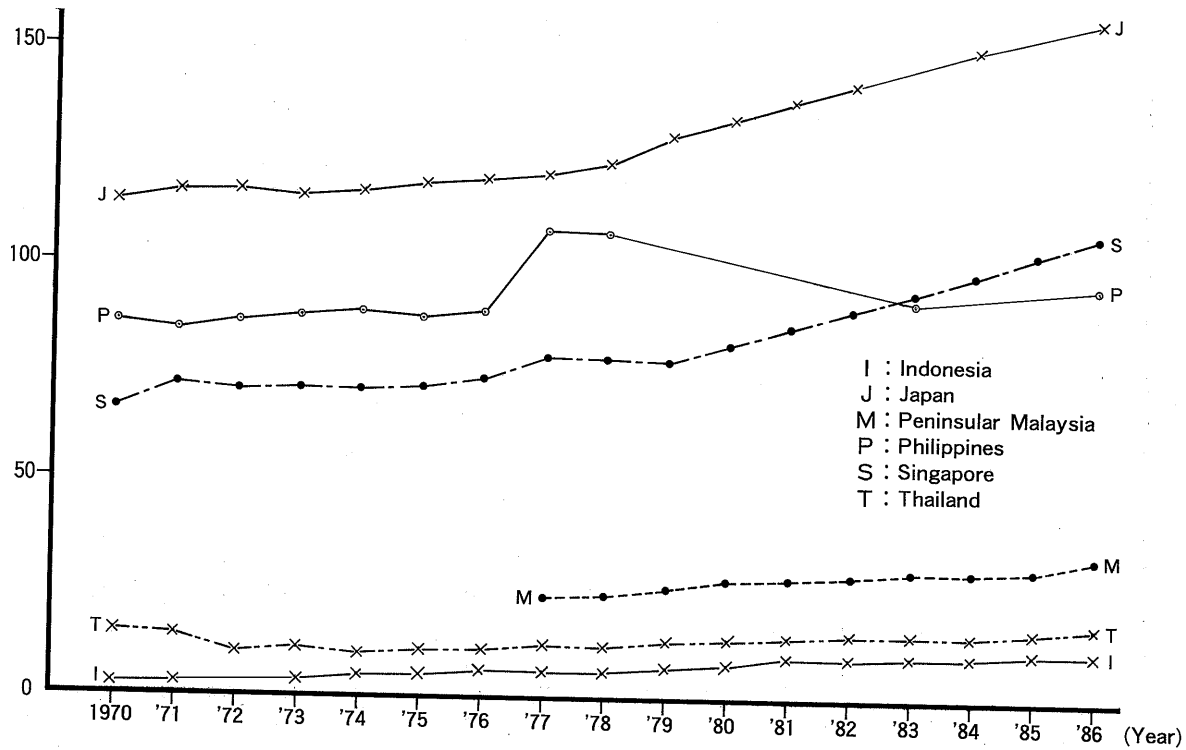
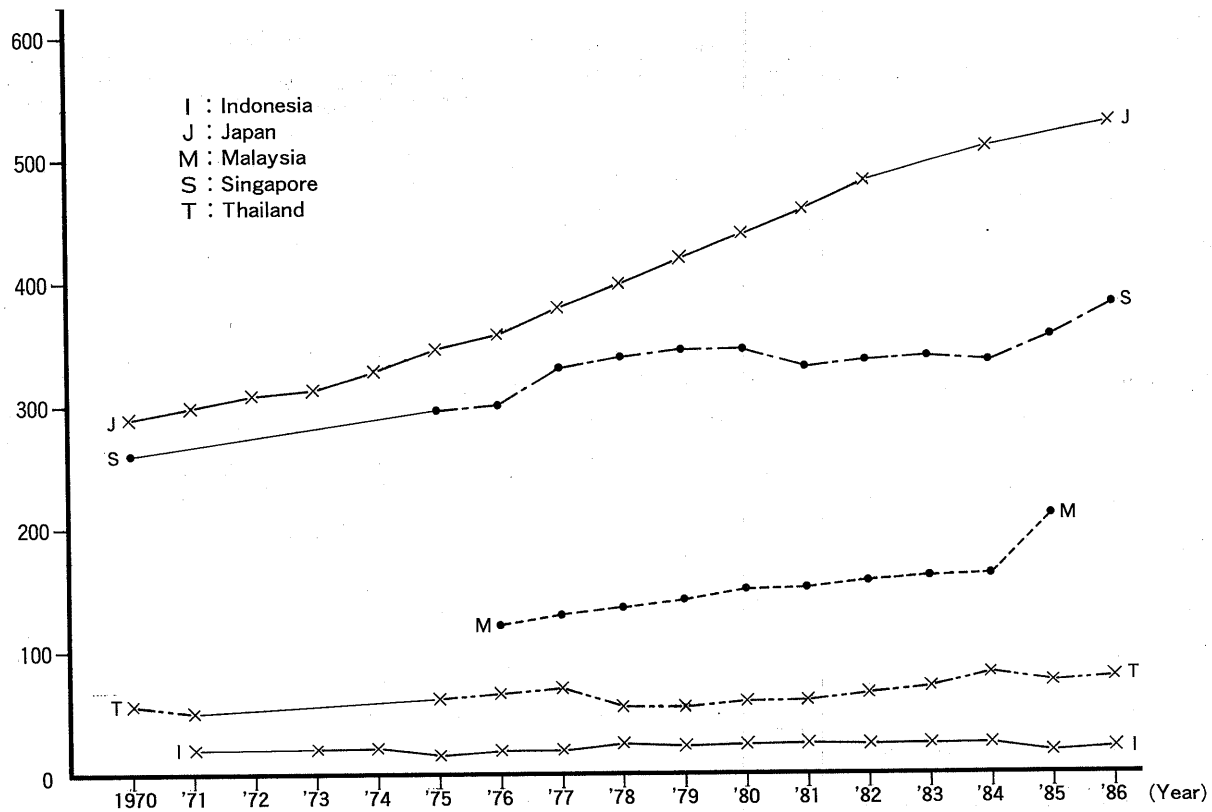


Fig.8 Annual Change of Number of Nurses (per 100,000)



16-3 Hospital Utilization by Category of Hospital (1)

	Year	All Hospitals					General Hospitals					
		Type	Population per Bed	Beds per 10,000 Population	Admissions per 10,000 Population	Bed Occupancy Rate (%)	Type	Beds per 10,000 Population	Admissions		Bed Occupancy Rate (%)	Average Length of Stay (Days)
									per 10,000 Population	per Bed		
INDONESIA ⁽¹⁾	1986		1,498	6.68	175.23	53.49		3.70	151.80	29.68	54.03	6.64
JAPAN	1986	T	79.3	126.1	727.0*	85.7	T	104.2	713.6*	7.8	83.9	39.7
MALAYSIA ⁽²⁾	1986		489	20.5	696.9	66.5		8.37	362.41	43.27	72.83	5.65
Peninsular Malaysia		A	490	20.4	680.0	63.8	A	8.71	375.67	43.15	73.28	5.62
Sabah			454	22.02	839.9	60.6		9.12	401.38	44.02	65.23	5.41
Sarawak			509	19.7	725.3	76.9		4.83	213.02	44.12	77.84	6.38
PHILIPPINES ⁽³⁾	1986	T	3,273	3.1	41.0							
SINGAPORE	1986	T	259	38.6	1,125.5	73.1	T	22.6	941.8	41.7	69.4	5.8
THAIRAND ⁽⁴⁾	1986	T	622	16.1			T	3.1				

Source: (1) Directorate of Medical Care, Ministry of Health
 (2) Information and Documentation System Unit, Ministry of Health
 (3) Bureau of Medical Services, Department of Health
 (4) Health Statistics Division, Ministry of Public Health

Note: Category of hospitals
 T=Total
 A=Government hospital establishments

Local or Rural Hospitals						Medical and Maternity Centers					
Type	Beds per 10,000 Population	Admissions		Beds Occupancy Rate (%)	Aver. Length of Stay (Days)	Type	Beds per 10,000 Population	Admissions		Bed Occupancy Rate (%)	Average Length of Stay (Days)
		per 10,000 Population	per Bed					per 10,000 Population	per Bed		
T	1.40	44.03	31.26	46.11	5.38	T	0.8				
A	7.74	327.28	42.31	55.34	4.81						
	7.04	296.50	42.14	51.96	4.54						
	10.53	435.21	41.34	52.17	4.67						
	11.56	507.58	43.90	75.89	6.31						
T	2.0										

16-3 Hospital Utilization by Category of Hospital (2)

	Year	Tuberculosis Hospitals						Mental Hospitals			
		Type	Beds per 10,000 Population	Admissions		Beds Occupancy Rate (%)	Average Length of Stay (Days)	Type	Beds per 10,000 Population	Admissions	
				per 10,000 Population	per Bed					per 10,000 Population	per Bed
INDONESIA	1986	T		0.73	8.32	56.35	24.72	T	0.44	1.44	3.28
JAPAN	1986	T	4.2	0.21	0.05	55.9	200.3	T	28.0	13.14	0.46
MALAYSIA Peninsular Malaysia Sabah Sarawak	1986	A	0.21	1.68	8.12	65.9	31.5	A	3.45	4.28	1.24
									3.83	4.84	1.26
									2.38	3.31	1.39
									1.04	0.20	0.20
PHILIPPINES	1986	T	0.1	1.35		76	22	Special	0.9	0.7	
SINGAPORE	1986							T	11.6	24.4	2.1
THAILAND	1986	T	0.1					T	1.4		

		Maternity Hospitals					
Bed Occupancy Rate(%)	Average Length of Stay (Days)	Type	Beds per 10,000 Population	Admissions		Beds Occupancy Rate(%)	Average Length of Stay (Days)
				per 10,000 Population	Per Bed		
53.49	130	T	0.11	3.64	34.3	36.98	3.93
100.6	532.6						
78.46	228.48						
77.78	253.63						
80.13	189.14						
87.28	105.67						
76.90	28.9	Special	0.13	6.6		69	2.2
82.7	144.2	T	2.2	153.5	70.8	74.8	3.9
		A	0.2				

16-4 Number of Hospitals

		1970	1975	1980	1982	1983	1984	1985	1986
INDONESIA ⁽¹⁾		1,164	1,115	1,208	1,246	1,273	1,306	1,367	1,408
JAPAN ⁽²⁾		7,974	8,294	9,055	9,403	9,515	9,574	9,608	9,699
MALAYSIA ⁽³⁾									
Peninsular Malaysia		64				96	98	101	101
Sabah			15			64	65	68	68
Sarawak		14	14			16	16	16	16
						16	17	17	17
PHILIPPINES ⁽⁴⁾	Total	650	927	2,020	1,713	1,706	1,839	1,815	1,846
	Public	220	316	413	519	527	612 ^{a)}	624	617 ^{a)}
	Private	430	611	1,607	1,194	1,179	1,227	1,191	1,229
SINGAPORE ⁽⁵⁾	Total	16	22	26	26	23	22	22	22
	Government	11	14	13	13	11	11	10	10
	Private	5	8	13	13	12	11	12	12
THAILAND ⁽⁶⁾	Total	98	281	636	718	808	850	856	891

Source: (1) Ministry of Health
(2) Ministry of Health & Welfare
(3) Information and Documentation System Unit,
Ministry of Health
(4) Bureau of Medical Services, Department of Health

(5) *Yearbook of Statistics, Singapore, 1986*

(6) Health Statistics Division, Ministry of Public Health

Note: a) Include : Medical Centers, Regional, Provincial, District,
Municipal, Special, Sanitaria & Medicare
Community Hospitals under Department of Health

16-5 Number of Beds

		1970	1975	1980	1982	1983	1984	1985	1986
INDONESIA ⁽¹⁾		86,022	83,696	98,543	102,912	103,586	104,966	111,300	110,361
JAPAN ⁽²⁾		1,062,553	1,164,098	1,319,406	1,401,999	1,440,381	1,467,050	1,495,328	1,533,887
MALAYSIA ⁽³⁾				35,291 ^{a)}	35,605 ^{a)}	35,779	32,669	32,495	32,960 ^{a)}
Peninsular Malaysia		27,927		29,792 ^{a)}	29,533 ^{a)}	29,661	26,993	26,491	27,185
Sabah			2,233	2,670 ^{a)}	2,924 ^{a)}	2,950	2,534	2,809	2,799
Sarawak		2,000	2,358	2,829 ^{a)}	3,148 ^{a)}	3,168	3,142	3,195	2,976
PHILIPPINES ⁽⁴⁾	Total	40,289	55,323	81,976	88,250	84,142	90,279	89,668	89,171
	Public	19,725	27,075	39,625	48,199	45,187	47,861 ^{b)}	48,045	48,906
	Private	20,564	28,248	42,351	40,051	38,955	42,418	41,623	40,265
SINGAPORE ⁽⁵⁾	Total		9,105	9,579	9,822	9,807	9,668	9,866	9,974
	Government		8,005	8,078	8,246	8,222	8,085	8,047	7,898
	Private	6,891	1,100	1,501	1,576	1,585	1,583	1,819	2,076
THAILAND ⁽⁶⁾	Total	25,619	52,652	71,718	74,725	78,438	81,070 ^{c)}	84,045 ^{c)}	85,697 ^{c)}

Source: (1) Welfare Indicator, 1982
(2) Data from Ministry of Health & Welfare
(3) Information and Documentation System Unit
Ministry of Health
(4) Bureau of Medical Services, Department of Health
(5) Yearbook of Statistics, Singapore, 1986

(6) Health Statistics Division, Ministry of Public Health

Note: a) Including those in government hospitals
b) Including other government agencies
c) Including private maternity centers

17 Definition of Medical Personnel (WHO)

Occupation and level of education	Personnel to be included in the data
1. Physicians High (university) level	All graduates of a medical school of faculty actually working in your country in any medical field (practice, teaching, administration, research, laboratory, etc.).
2. Medical assistants Middle level	Personnel performing duties ranging from simple curative procedures for common diseases to wider medical care that may include a variety of diagnostic, curative and preventive practices. These personnel have no medical education of university level or equivalent.
3. Multipurpose health auxiliaries Basic level	Personnel who may have no more than elementary general education and a few months of in-service training and who provide basic health services at the village level.
4. Dentists/Dental surgeons (a) High (university) level (b) Middle (non-university) level	(a) All graduates of a dental school (or faculty of odontology or stomatology) actually working in your country in any dental field. (b) Personnel qualified from a dental school of non-university level and licensed to practice dentistry in your country.
5. Dental operating auxiliaries	Personnel performing a limited range of diagnostic, preventive, and curative services in dentistry. These personnel usually do not have complete dental education of university level or equivalent.
6. Dental non-operating auxiliaries (a) Dental laboratory technicians (b) Dental chairside assistants	Dental non-operating auxiliaries who assist dentists and dental operating auxiliaries in their clinical work but who do not carry out any independent intra-oral procedures. These dental personnel usually have technical training either in formal courses or by apprenticeship.

Occupation and level of education	Personnel to be included in the data
7. Pharmacists/Chemists High (university) level	All graduates of a faculty or school of pharmacy actually working in your country in pharmacies, hospitals, laboratories, industry, etc.
8. Pharmaceutical assistants Middle level	Personnel assisting in pharmacies, hospitals, or dispensaries to make and dispense medicaments, under the supervision of a pharmacist. These personnel do not have pharmaceutical education of university level or equivalent.
9. Veterinarians/Veterinary surgeons High (university) level	All graduates of a faculty or school of veterinary medicine actually working in your country in any field of veterinary activity, including teaching and public health.
10. Animal health Assistants Middle level	Personnel carrying out limited diagnostic, preventive, and curative veterinary services. These personnel have no veterinary education of university level.
11. Professional Midwives High level (a) Non-nurse midwives (b) Nurse-midwives	All graduates of a midwifery school actually working in your country in any field of midwifery (practice in institutions and community health services, teaching, administration, private practice, etc.)
12. Assistant midwives/auxiliary midwives Middle level	Personnel carrying out midwifery duties in normal obstetrics, in institutions and other health services, in principle under the supervision of a professional midwife. These personnel do not have the full education and training of a professional midwife.
13. Auxiliary Nurse-midwives Middle level	Personnel performing certain nursing duties and midwifery duties in normal obstetrics, in principle under the supervision of a professional nurse or midwife. These personnel have simpler education and training in nursing and midwifery than the professional nurse-midwife.

Occupation and level of education	Personnel to be included in the data
14. Professional Nurses High level	All graduates of a nursing school working in your country in any nursing field (general nursing, specialized clinical nursing services in mental health, paediatrics, cardiovascular diseases, etc.—public health or occupational health, teaching, administration, research, etc.). These personnel are qualified and authorized to provide the most responsible and competent professional nursing service.
15. Assistant nurses/auxiliary nurses Middle level	Personnel performing general patient care of a less complex nature in hospitals and other health services, in principle under the supervision of a professional nurse. These personnel do not have the full education and training of a professional nurse.
16. Nursing and mid-wifery aids Basic level	Personnel performing specified non-technical tasks in institutions or community health services under nursing supervision. These personnel usually have on-the-job or short training.
17. Physiotherapists/Physical therapists	Professional personnel treating patients by exercise, physical means, and massage, usually as prescribed by a physician.
18. Medical laboratory technicians High-level technicians	Professionals who have graduated from a school for laboratory technicians and work under the responsibility of a scientific or medical specialist. They also participate in the supervision, teaching and training of subordinate technical personnel.
19. Assistant medical laboratory technicians Middle-level	Auxiliary technical laboratory personnel working under the supervision of a professional laboratory technologist or technician. These auxiliary personnel do not have the full training and theoretical knowledge of the professional.

Occupation and level of education	Personnel to be included in the data
20. Medical Physicists High (university) level	All graduates of a university or faculty of natural science with qualification in physics and mathematics and special education and training in the field of medical physics.
21. Medical radiological technicians High-level technicians	Professionals who have graduated from a school for radiological technicians and work under the general responsibility of a specialist or physician in the field of radiology. If possible, indicate the distribution of medical activity: (a) MRT (General) (b) MRT (Diagnosis) (c) MRT (Therapy)
22. Assistant medical radiological technicians Middle-level technicians	Auxiliary medical radiological personnel working under the direct supervision of a medical radiological technician or under a specialist or physician.
23. Sanitray engineers High (university) level	Professionally qualified engineers specialized in the prevention, control, and management of environmental factors that influence man's health adversely, e.g., in the design and operation of facilities for control and the planning and administration of environmental health programmes.
24. Sanitarians High-level technicians	Professional personnel other than physicians inspecting the environment, promoting measures to restore or improve sanitary conditions (food inspection, inspection of public premises, etc.) and supervising the implementation of these measures.
25. Auxiliary sanitarians Middle-level technicians	Personnel who perform to a limited extent the functions of a professional sanitarian but do not have the full training and theoretical knowledge of the professional.

Occupation and level of education	Personnel to be included in the data
26. Other scientific or professional personnel Examples: Biochemists Biologists Entomologists Psychologists Nutritionists Dietitians Occupational therapists Speech therapists Other special therapists Health educators Health statisticians Medical record librarians	Scientific (university) or professional personnel working in the health field, but not classifiable under previous items (e.g., excluding physicians).
27. Other technical personnel Examples: Cardiology technicians Encephalographers Opticians Orthopaedic technicians Hearing aid technicians Health statistical technicians Medical records technicians	Technical personnel in the health field not classifiable under previous items.
28. Other health auxiliaries and aides examples: Microscopists Laboratory aides Dark-room assistants	Health auxiliaries not classifiable under previous items, who generally have not more than primary general education and an elementary technical training by apprenticeship or in-service training.

Occupation and level of education	Personnel to be included in the data
29. Practitioners of traditional medicine/midwifery Examples: Herb doctors Ayurvedic doctors Lay medical practitioners Medicine men Acupuncturists Traditional birth attendants	

17-1 Comparative Table of Medical Personnel

	Indonesia (1986)	Japan (1985)	Malaysia (1986)			Philippines (1986)	Singapore (1986)	Thailand (1986)
			Peninsular Malaysia	Sabah	Sarawak			
1 Physicians	v	v	v	v	v	v	v	v
2 Medical assistants			v	v	v			v
3 Multipurpose health auxiliaries			v	v	v	v		v
4 Dentists/Dental surgeons	v	v	v	v	v	v	v	v
5 Dental operating auxiliaries	v	v	v	v	v	v	v	v
6 Dental non-operating auxiliaries	v			v	v		v	v
7 Pharmacists/Chemists	v	v	v	v	v	v	v	v
8 Pharmaceutical assistants	v		v	v	v		v	v
9 Veterinarians/Veterinary surgeons	v	v	v	v	v	v	v	v
10 Animal health assistants					v		v	v
11 Professional midwives	v	v	v	v	v	v	v	v
12 Assistant midwives/Auxiliary midwives	v		v	v	v			v
13 Auxiliary nurse-midwives	v		v	v	v			v
14 Professional nurses	v	v	v	v	v	v	v	v
15 Assistant nurses/Auxiliary nurses	v	v	v	v	v		v	v
16 Nursing and midwifery aids	v		v	v	v	v		v
17 Physiotherapists/Physical therapists	v	v	v	v	v	v	v	v
18 Medical laboratory technicians	v	v	v	v	v	v	v	v
19 Assistant medical laboratory technicians	v	v	v	v	v		v	v
20 Medical physicist		v	v				v	v
21 Medical radiological technicians	v	v	v	v	v	v	v	v
22 Assistant medical radiological technicians	v	v	v	v	v		v	v
23 Sanitary engineers	v		v	v	v	v	v	v
24 Sanitarians	v		v	v	v	v	v	v
25 Auxiliary sanitarians	v		v	v	v		v	v
26 Other scientific or professional personnel	v	v	v	v	v		v	v
27 Other technical personnel		v	v	v	v		v	v
28 Other health auxiliaries and aides	v		v	v	v		v	v
29 Practitioners of traditional midwifery	v		v	v	v			v
30 Dental nurses	v		v	v	v		v	
31 Nurses including nurse-midwives	v		v	v	v		v	

	Indonesia (1986)	Japan (1985)	Malaysia (1986)			Philippines (1986)	Singapore (1986)	Thailand (1986)
			Peninsular Malaysia	Sabah	Sarawak			
32 Orthopaedic technicians								
33 Malaria field officers						v		
34 Medical social technicians								
35 Health statistics technicians			v					
36 Medical statistician			v					
37 Dental hygienists		v				v		v
38 Trained or rural midwives			v			v		
39 Traditional birth attendants						v		
40 Laboratory aides								v
41 Sanitary inspectors						v		
42 Medical social workers		v				v	v	
43 Dental practitioners			v	v	v		v	
44 Veterinary assistants							v	
45 Nurse-midwives	v							
46 Dental technicians	v		v	v	v		v	
47 Dispensers			v	v	v		v	
48 Assistant nurse-midwives								
49 Nurses	v	v	v			v	v	
50 Occupational therapists		v	v	v	v	v	v	
51 Dietitians	v		v	v	v	v	v	v
52 Radiographers			v	v	v		v	
53 Nursing auxiliaries								
54 X-ray assistant technicians								
55 Health inspectors			v	v	v		v	
56 Assistant health inspectors			v	v	v		v	
57 Biochemists			v	v	v			v
58 Health educators	v		v	v	v	v	v	v
59 Midwives	v	v	v			v	v	
60 Microscopists								
61 Health assistants								
62 Entomologists			v	v	v	v		

17-2 Medical and Allied Health Personnel (1)

	Year	1. Physicians	2. Medical Assistants	3. Multi-purpose Health Auxiliaries	4. Dentists/ Dental Surgeons	5. Dental Operating Auxiliaries	6. Dental Non-operating Auxiliaries	7. Pharmacists/ Chemists
INDONESIA ⁽¹⁾	1986 ^{a)}	20,768	• •	• •	4,237			3,950
JAPAN	1986	191,346	• •	• •	66,797	31,139	• •	135,990
MALAYSIA ⁽²⁾	1986	5,394	2,932 ^{b)}	—	1,130	—	—	963
Peninsular Malaysia		4,938	2,152	—	1,030	—	—	828
Sabah		216	381	—	40	—	—	84
Sarawak		240	399	—	60	—	—	51
PHILIPPINES	1986	53,556 ^{c)}	• •	127,329 ^{d)}	22,467 ^{c)}	779 ^{e)} 1,290 ^{b)}	• •	26,854 ^{c)}
SINGAPORE	1986	2,781	• •	• •	632	285	43 ^{b)}	454 ^{g)}
THAILAND ⁽³⁾	1986	9,460	14	245,992	1,395	484	484	3,356

Source: (1) Personnel Bureau, Ministry of Health, 1986
(2) *Establishment Book*, Information and Documentation System Unit, Ministry of Health
(3) Health Statistics Division, Ministry of Public Health

Note: a) Data as of March, 1986
b) Government
c) Registered as of December, 1986
d) Barangay health workers active only as of December, 1985
e) Private
f) Department of Health only, 1986
g) Pharmacists only
h) Entry used for calculation of Population/Nursing and Midwifery Personnel Ratios

8. Pharmaceutical Assistants	9. Veterinarians/ Veterinary Surgeons	10. Animal Health Assistant	11. Professional Midwives	12. Assistant Midwives/ Auxiliary Midwives	13. Auxiliary Nurse-Midwives	14. Professional Nurses	15. Assistant Nurses/ Auxiliary Nurses	16. Nursing and Midwives Aids
	..	..	15,375		..			..
..		..	24,056	...	..	333,040	288,411	..
1,378 ^{b)} 1,162 90 126	..	..	3,795 ^{b)}	— — — —	— — — —	— 20,170 — —	— 7,308 — —	— — — —
..	2,576 ^{c)}		65,899 ^{c)}	..	..	151,870 ^{c)}		5,178 ^{f)}
237	59	113 ^{b)}	601 ^{h)}	..	..	6,402 ^{h)}	2,166 ^{h)}	..
1,048 989 1,155	762 503 770	2,287 125 2,250	7,716 8,573 6,700		4,134 4,251 4,105	38,683 31,827 40,952	16,982 16,411 16,474	1,329 1,523 1,252

17-2 Medical and Allied Health Personnel (2)

	Year	17. Physio-therapists/ Physical Therapists	18. Medical Laboratory Technicians	19. Assistant Medical Laboratory Technicians	20. Medical Physicists	21. Medical Radiological Technicians	22. Assistant Medical Radiological Technicians	23. Sanitary Engineers
INDONESIA ⁽¹⁾	1986	319	89	2,171	..	166	312	—
JAPAN	1985	5415	36,346	974	5,598	20,919	2,236	..
MALAYSIA ⁽²⁾	1986 ^{a)}	126 ^{b)}	809 ^{b)}	1,014 ^{b)}	—	—	—	18
Peninsular Malaysia		104	737	1,798	10	—	—	15
Sabah		7	61	60	—	—	—	1
Sarawak		15	11	156	1	—	—	2
PHILIPPINES	1986	873 ^{c)}	17,534 ^{c)}			3,168 ^{d)}	..	1,214 ^{c)}
SINGAPORE	1986	27 ^{a)}	219 ^{a)}	102 ^{a)}		104 ^{a)}	34 ^{a)}	170 ^{a)}
THAILAND ⁽³⁾	1986	210	475	346	201	282	513	20

Source: (1) Centre for Health Manpower Education, 1986
 (2) *Establishment Book*, Information and Documentation System Unit, Ministry of Health
 (3) Health Statistics Division, Ministry of Public Health

Note: a) Ministry of Health, Central Office only
 b) For 1985
 c) Preregistered as of December, 1986
 d) Registered as of December 1986, Radiological Health Service
 e) Department of Health only

24. Sanitarians	25. Auxiliary Sanitarians	26. Other Scientific or Professional Personnel	27. Other Technical Personnel	28. Other Health Auxiliaries and Aids	29. Practitioners of Traditional Medicine/Midwifery	30. Dental Nurses	31. Nurses Including Nurse-Midwives	32. Orthopaedic Technicians
5,605	2,959		..		..	2,806	15,544	
..	..		18,223 ^{a)}	..	..	..	...	1,632
—	—	—	—	—	—	984	—	—
—	—	—	—	—	—	753	—	—
—	—	—	—	—	—	78	—	—
—	—	—	—	—	—	153	—	—
2,711 ^{e)}	..		..	..	..	..	..	
224 ^{a)}	343 ^{a)}	82 ^{a)}	50 ^{a)}	82 ^{a)}	..	321 ^{a)}	8,568	
388	4,089					..	..	

17-2 Medical and Allied Health Personnel (3)

	Year	33. Malaria Field Officers	34. Medical Social Technicians	35. Health Statistics Technicians	36. Medical Statistician	37. Dental Hygienists	38. Trained or Rural Midwives	39. Traditional Birth Attendants
INDONESIA ⁽¹⁾	1986							
JAPAN	1986	..	..	..	..	32,666	..	..
MALAYSIA ⁽²⁾	1986 ^{a)}	—	—	9	3	—	—	—
Peninsular Malaysia		—	—	9	3	—	655	—
Sabah		—	—	—	—	—	—	—
Sarawak		—	—	—	—	—	—	—
PHILIPPINES	1986	621 ^{c)}	—	—	—	6 ^{d)}	9,789 ^{c)}	31,292 ^{c)}
SINGAPORE	1986	..	..			..	..	..
THAILAND	1986					698		

Source: (1) Centre for Health Manpower Education, 1986
(2) *Establishment Book*, Information and Documentation System Unit, Ministry of Health

Note: a) Government
b) DIV II, dentist private sector
c) Ministry of Health only
d) Professional regulation commission, 1986

40. Laboratory Aids	41. Sanitary Inspectors	42. Medical Social Workers	43. Dental Practitioners	44. Veterinary Assistants	45. Nurse-midwives	46. Dental Technicians	47. Dispensers	48. Assistant Nurse-midwives
					15,118	51		
..	..	3,619	..	..	..	..	..	..
—	—	—	282 ^{b)}	—	—	281	1378	—
—	—	—	183 ^{b)}	—	—	229	1162	—
—	—	—	44 ^{b)}	—	—	24	90	—
—	—	—	55 ^{b)}	—	—	28	126	—
	2,711 ^{c)}	315						
..	..	40 ^{d)}	632	12 ^{a)}	..	43 ^{a)}	206 ^{a)}	..
12								

17-2 Medical and Allied Health Personnel (4)

	Year	49. Nurses	50. Occupational Therapists	51. Dietitians	52. Radiographers	53. Nursing Auxiliaries	54. X-ray Assistant Technicians	55. Health Inspectors
INDONESIA ⁽¹⁾	1986	37,618		1,234				
JAPAN	1986	639,936	1,986	..	..	..	..	..
MALAYSIA ⁽³⁾	1986	—	43 ^{a)}	35 ^{a)}	280 ^{a)}	—	—	931 ^{a)}
Peninsular Malaysia		20,170	36	27	229	—	—	756
Sabah		—	3	4	15	—	—	79
Sarawak		—	4	4	36	—	—	97
PHILIPPINES	1986	151,870 ^{b)}	109 ^{b)}	5,673 ^{b)}				
SINGAPORE	1986	8,568	16 ^{a)}	13 ^{a)}	104 ^{a)}	..	..	224 ^{a)}
THAILAND ⁽⁴⁾	1986			98				

Source: (1) Centre for Health Manpower Education, 1986
 (2) Centre for Training for Health Personnel, 1986
 (3) *Establishment Book*, Information and Documentation System Unit, Ministry of Health ; Operating Expenditure on Post Vol. 11—1983, Ministry of Finance
 (4) Health Statistics Division, Ministry of Public Health

Note: a) Government
 b) Registered as of 1986, Professional Regulations Commission
 c) Department of Health only

56. Assistant Health Inspectors	57. Bio-chemists	58. Health Educators	59. Midwives	60. Microscopists	61. Health Assistants	62. Entomologists	63. Dental Surgery Assistants	64. Nutritionists	65. Darkroom Assistants
		78 ⁽²⁾	22,500						
..	..	..	24,056	..	..	..	..	20,642	..
2182 ^{a)}	50 ^{a)}	49 ^{a)}	—	—	—	16 ^{a)}	849	15 ^{a)}	—
1661	43	43	3,795 ^{a)}	—	—	13	766	13	—
202	5	3	—	—	—	1	35	1	—
319	2	3	—	—	—	2	48	1	—
		144 ^{a)}	65,899 ^{b)}			7 ^{c)}		5,673 ^{b)}	
343 ^{a)}		7 ^{a)}	601	..	..		..		..
	36	239						362	13

17-3 Population/Health Personnel Ratios

	Year	Physicians per 10,000 Population	Population per Physicians	Dentists per 10,000 Population	Population per Dentists	Pharma- cists per 10,000 Population	Population per Phar- macists	Medical Assistants per 10,000 Population	Population per Medical Assistants	Nursing Personnels per 10,000 Population	Population per Nursing Personnels	Nursing and Midwifery Personnels per 10,000 Population	Population per Nursing and Midwifery Personnels
INDONESIA	1986	1.8	8,486	0.3	39,807	0.25	39,974	• •	• •	1.6	6,255	3.30	3,214
JAPAN	1986	15.7	636	5.49	1,822	11.18	895	• •	• •	52.6	190	54.57	183
MALAYSIA	1986	3.35	2,986	0.70	14,255	0.60	16,728	1.82	5494	—	—	—	—
Peninsular Malaysia		3.71	2,698	0.77	12,936	0.62	16,092	1.68	6191	15.14	661	17.99	555.97
Sabah		1.70	5,884	0.31	31,775	0.66	15,131	3.00	3336	—	—	—	—
Sarawak		1.59	6,308	0.40	25,232	0.34	29,684	2.64	3794	—	—	—	—
PHILIPPINES ⁽¹⁾	1986	9.56	1,046	4.01	2,493	4.80	2,085	• •	• •	27.12	369	38.88	257
SINGAPORE	1986	10.8	930	2.4	4,092	1.8	5,696	• •	• •	33.1	302	35.5	282
THAILAND	1986	1.80	5,564	0.26	37,745	0.64	15,689	0.00	3,761,000	7.78	1,286		

Source: Ministry of Health in each country

(1) Professional Regulation Commission (PRC)

17-4 Number of Physicians

	1970	1975	1980	1981	1983	1984	1985	1986
INDONESIA	3,578	8,279	12,931 ⁽¹⁾	15,400 ⁽¹⁾	16,698 ⁽¹⁾	17,760 ⁽²⁾	19,875 ⁽³⁾	20,176 ⁽³⁾
JAPAN	118,990	132,479	156,235	162,882	—	181,101	—	191,346
MALAYSIA			3,858 ⁽⁵⁾	3,941 ⁽⁵⁾	4,474 ⁽⁵⁾	4,505 ⁽⁵⁾	4,939 ⁽⁵⁾	5,394 ⁽⁵⁾
Peninsular Malaysia	2,370	2,511 ⁽⁴⁾	3,518	3,584	4,082	4,111	4,541	4,938
Sabah			141	150	174	174	174	216
Sarawak	80	131	199	207	218	220	224	240
PHILIPPINES	31,515	37,276	7,259 ^{a)}	7,378 ^{a)}	47,989 ^(6)b)	49,602 ^(6)b)	49,602 ^(6)b)	53,556 ^(6)b)
SINGAPORE ⁽⁷⁾	1,363	1,622	1,976	2,091	2,361	2,504	2,631	2,781
THAILAND ⁽⁸⁾	5,407	5,005	6,867	6,931	7,902	8,058	8,650	9,464

Source: (1) The Health Situation of Indonesia, Department of Health 1984
(2) Consortium Health Science, Ministry of Education and Culture Medical Science, Jakarta, November 1984
(3) Personnel Bureau as of March, 1986
(4) Statistical Handbook of Peninsular Malaysia, 1976
(5) Medical Council Ministry of Health
(6) Professional Regulation Commissioner (PRC)
(7) *Yearbook of Statistics, Singapore 1986*
(8) Health Statistics Division, Ministry of Public Health

Note: a) Department of Health manpower only
b) Registered physicians (government & private) as of 1986

17-5 Number of Dentists

	1970	1975	1980	1982	1983	1984	1985	1986
INDONESIA ⁽¹⁾	452		1,681	2,128	2,364	2,664	4,237 ^{a)}	4,237 ^{a)}
JAPAN	37,859	43,586	53,602	58,362	—	63,145	—	66,797
MALAYSIA ^(2) b)			691	798	858	957	1,041	1,130
Peninsular Malaysia		443	630	724	774	867	949	1,030
Sabah	15	9	25	42	48	40	36	46
Sarawak			36	32	36	50	56	60
PHILIPPINES	12,174	13,096	1,029 ^{c)}	984 ^{c)}	8,057 ^{d)}	20,304 ^(3) d)	20,542 ^(3) d)	22,467 ^(3) d)
SINGAPORE	398	419	485	530	555	588	604	632
THAILAND	683	652	1,169	1,142	1,247	1,326	1,451	1,395

Source: (1) The Health Situation of Indonesia, Department of Health, 1984

(2) Dental Board, Ministry of Health

(3) Professional Regulation Commissioner (PRC)

Note: a) Personnel Bureau, June, 1986

b) As of December 31

c) Government and private

d) Registered as of 1986, government and private

17-6 Number of Pharmacists

	1970	1975	1980	1982	1983	1984	1985	1986
INDONESIA ⁽¹⁾	1,486	1,847	3,013	3,389	3,587	3,926 ^{a)}	3,950	4,170 ^{a)}
JAPAN	79,393	94,362	116,056	124,390	—	129,700	—	135,990
MALAYSIA ^{b)}		258	488	626 ⁽²⁾	676 ⁽²⁾	734 ^(c)	843 ^(c)	963 ^(c)
Peninsular Malaysia				595 ⁽²⁾	598 ⁽²⁾	676 ^(c)	732	828
Sabah			17 ⁽³⁾	12 ⁽²⁾	37 ⁽⁴⁾	29 ^(c)	64	84
Sarawak				19 ⁽²⁾	41 ⁽²⁾	29 ^(c)	47	51
PHILIPPINES	19,076	20,838	518 ^{d)}	504 ^{d)}	25,337 ^{e)}	26,005 ^(5) e)	26,005 ^(5) b)	26,854 ^(5) e)
SINGAPORE ⁽⁶⁾	245	288	368	373	387	409	436	454
THAILAND ⁽⁷⁾	1,407	1,913	2,650	3,097	2,990	3,312	3,376	3,356

Source: (1) The Health Situation of Indonesia, Department of Health, 1984

(2) *Indicator for Monitoring and Evaluation of Strategy for Health for All by the year 2000*, Information and Documentation System Unit, Ministry of Health

(3) *Annual Report*, Medical Department, Sabah, 1982

(4) Data provided by Medical Department

(5) Professional Regulation Commission (PRC)

(6) *Yearbook of Statistics, Singapore, 1986*

(7) Health Statistics Division, Ministry of Public Health

Note:

a) Directorate General, Food & Drugs Control, Ministry of Health, 1986

b) As of Dec. 31

c) Pharmacy Board, Ministry of Health

d) Department of Health manpower only

e) Registered pharmacists (government & private) as of 1986

17-7 Number of Midwives

	1970	1975	1980	1982	1983	1984	1985	1986
INDONESIA ⁽¹⁾	3,752	10,720	16,472	17,207	17,486	17,685 ⁽²⁾	51,375 ⁽³⁾	22,500 ⁽²⁾
JAPAN	28,087	26,742	25,867	25,416	—	24,649	—	24,056
MALAYSIA ⁽⁴⁾								
Peninsular Malaysia		3,767	5,002 ⁽⁵⁾	5,353 ⁽⁵⁾	5,432 ⁽⁵⁾	5,468 ⁽⁵⁾	5,673	3,795 ⁽⁵⁾
Sabah				417		400	—	—
Sarawak				338 ^{a)}			970	—
PHILIPPINES ⁽⁶⁾	16,082	26,680	9,329 ^{a)}	9,428 ^{a)}	14,021 ^{a)}	62,972 ^{b)}	62,972 ^{b)}	65,899 ^{b)}
SINGAPORE ⁽⁷⁾	1,058	930	779	722	710	652	650	601
THAILAND ⁽⁸⁾	4,203	6,335	8,669	8,851	9,100	8,573	7,716	6,700

Source: (1) *The Health Situation of Indonesia*, Department of Health, 1984

(2) Centre for Health Manpower Education, Ministry of Health, 1986

(3) International General, Ministry of Health, September, 1986

(4) Nursing Board, Ministry of Health

(5) Division II, Midwives & Jururawat Desa

(6) Professional Regulation Commission (PRC).

(7) *Yearbook of Statistics, Singapore, 1986*

(8) Health Statistics Division, Ministry of Public Health

Note: a) Department of Health manpower only
b) Registered as of 1986, government & private

17-8 Number of Nurses

	1970	1975	1980	1982	1983	1984	1985	1986
INDONESIA ⁽¹⁾		9,856	20,201	22,205	22,487	25,834 ⁽²⁾	30,515 ⁽²⁾	37,618 ⁽²⁾
JAPAN	273,572	361,604	487,169	540,971	—	590,177	—	639,936
MALAYSIA ⁽³⁾								
Peninsular Malaysia			15,392	17,144	17,916	18,653	19,479	20,170
Sabah				633	640 ⁽⁴⁾	695	779	—
Sarawak				554		623 ⁽⁵⁾	778	—
PHILIPPINES ⁽⁶⁾	38,918	64,155	9,605 ^{a)}	9,075 ^{a)}	11,917 ^{a)}	146,891 ^{b)}	146,891 ^{a)}	151,870 ^{b)}
SINGAPORE ⁽⁷⁾	4,304	5,767	7,545	7,534	7,714	7,830	8,395	8,568
THAILAND ⁽⁸⁾	15,387	18,993	18,483	22,878 ^{b)}	26,444	31,827	38,683	40,952

Source: (1) *The Health Situation of Indonesia*, Department of Health, 1984

(2) Centre for Health Manpower, Ministry of Education, 1986

(3) Nursing Board, Ministry of Health

(4) From Medical Department

(5) From Medical Department

(6) Professional Regulation Commission (PRC)

(7) *Yearbook of Statistics, Singapore 1986*

(8) Health Statistics Division, Ministry of Public Health

Note:

a) Department of Health manpower only

b) Registered as of 1986, government & private

18-1 Situation of Medical Schools

	Academic Year	Number of Medical Schools	Duration of Studies	Total Enrolment	Admissions	Graduates
INDONESIA ⁽¹⁾	1986	14 ^{a)} 10 ^{b)}	7 years ^{c)}		11,688 ^{a)}	21,694 ^{d)}
JAPAN ⁽²⁾	1986/87	80	6 years		8,240	7,951 ^{e)}
MALAYSIA ⁽³⁾	1985	3	6 years	2,013	—	—
PHILIPPINES ⁽⁴⁾	1984/85	28	Pre-Med-4 years Proper-4 years Intern-1 years	4,045 ^{f)}		2,958 ^{g)}
SINGAPORE ⁽⁵⁾	1986/87	1	5 years	862 ^{h)} 167 ⁱ⁾	166 ^{h)} 23 ⁱ⁾	168 ^{h)} 32 ⁱ⁾
THAILAND ⁽⁶⁾	1986	8	6 years			750

Source: (1) Consortium Medical Service
(2) Ministry of Education
(3) Ministry of Education
(4) Association of Philippine Medical Colleges
(5) National University of Singapore
(6) Ministry of Health

Note: a) Government
b) Private
c) 6 Years at the Medical Faculty, University of Indonesia, Jakarta
d) Date up to July 1986
e) Those who succeeded in national examination
f) Quota, only freshman enrolment for school year 1984—1985
g) School year 1984—1985
h) Singaporeans
i) Non-Singaporeans