

Research-data

B. No. 6

Investigation on the differential  
death-rate by economic ranks

— surveyed in 1940 —

by

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This investigation has been done with the fact of the previous year, 1939, in 1940, in order to survey the different death-rate according to the changing of social economic classes. Fifteen middle cities as Aomori City have been checked, and the reason why such a cities was chosen is chiefly due to the statistic point of view. The grades of the economic classes are due to the difference of their incomes and four grades are separated by the sum of the house rate tax.

This investigation was done by public officials for the essential investigative data of house-rate register, census register, temporary domicile and the notice of death; and written in the formal list. The numbers of cases investigated are 1,031,213.

The following is the changes of death-rate as the result of researching income ranks. It is not correct comparison to compare the classified income-rate with the total death, unless the population belongs to each class is constructed by the same age. Now, in this investigation, the age constructions of each income class show almost common ones between the high class and the middle one, and between the low class and the lowest one; but there show some differences between the high or middle class and the low or lowest one. However these differences one not so important problems to the total death-rate.

The Table of the Death-rate Observing by  
the Income Class & Age.

(per 10,000)

(Masculin)

Age Class	The Lowest	Low	Middle	High
Total	157.6	148.9	116.2	115.4
0	877.7	610.8	545.4	459.9
1 - 4	242.3	255.9	212.0	164.0
5 - 9	50.2	50.8	52.7	45.4
10 - 14	43.7	34.1	21.6	27.3
15 - 19	55.0	79.3	54.0	17.2
20 - 24	108.5	99.8	87.8	58.8
25 - 29	78.7	107.9	51.2	88.5
30 - 34	78.6	68.1	52.8	62.1
35 - 39	66.5	51.0	46.0	62.6
40 - 44	98.8	65.3	52.8	73.1
45 - 49	147.4	87.3	68.4	51.6
50 - 54	194.4	153.7	118.0	185.5
55 - 59	291.5	259.2	195.2	217.0
60 - 64	459.9	384.1	292.7	254.0
65 - 69	659.6	694.6	374.3	444.1
70 - 74	787.7	1026.7	645.6	795.5
75 - 79	784.2	1058.7	783.5	1159.5
Over 80	147.8	1844.6	1666.8	1356.0

(Feminine)

Total	137.5	139.2	126.5	121.7
0	739.0	526.6	501.3	469.3
1 - 4	227.7	248.5	244.3	179.8
5 - 9	48.0	47.3	47.5	72.1
10 - 14	43.2	21.3	43.1	36.9
15 - 19	100.3	96.5	80.2	43.7

Class Age	The Lowest	Low	Middle	High
20 - 24	04.0	74.4	72.5	43.2
25 - 29	68.8	57.1	54.6	60.3
30 - 34	67.9	70.2	87.2	60.4
35 - 39	95.6	71.2	73.0	77.1
40 - 44	95.6	85.0	79.8	67.7
45 - 49	1106.4	77.3	102.8	78.2
50 - 54	149.4	124.3	78.7	97.4
55 - 59	199.6	228.5	141.8	126.7
60 - 64	280.7	282.1	305.5	201.8
65 - 69	413.9	388.8	376.4	387.6
70 - 74	627.7	893.8	616.2	552.2
75 - 79	1046.5	938.0	933.7	1084.9
Over 80	1921.4	2237.6	2123.7	4241.4



The Japanese death-rate curved line is comparatively high at the age before twelve months, and descends with an acute angle till at the age of eleven or twelve, at that time it being the lowest, and gradually rises and near twenty becomes remarkably high, and a great rising figure appears on its line. After twenty its line re-descends until thirty-one or two, and after this the line rises again in proportion as the increasing of ages. Such a curved line with the rising figure, which is the peculiarity of Japanese, may be seen in any class except between at the age of fifteen and twenty-five of the high class. The reason of this may be the accidental result of much less population as compared with other classes. Generally speaking, the inverse proportion of the income to the death-rate is shown, and especially in infant the death-rate of the lowest class is twice as much as that of the high class and is remarkably high to that of European countries. These things show us there being much room for their improvement.



The Table of Death-rate observing by the Income Class  
and Case of Death

(per 1,000)

(masculine)

Case of Death	lowest	Low	Middle	High
congenital adynamia & malformation	0.74	0.73	0.47	0.24
digestive organs disease	2.17	1.78	2.04	1.94
pneumonia	1.74	2.04	1.02	1.28
tuberculosis	1.76	1.42	0.98	1.28
dysentery & summer diarrhoea	0.21	0.29	0.32	0.19
cerebral haemorrhage	1.77	1.71	1.55	1.19
cancer	0.51	0.53	0.62	0.81
scarlet fever	0.59	0.59	0.38	0.52
syphilis	0.11	0.04	0.04	
beriberi	0.17	0.11	0.02	0.14
meningitis	0.51	0.31	0.38	0.24
respiratory organs disease	1.15	1.43	0.79	0.62
circulatory organs disease	0.86	0.88	0.77	0.43
psychosis & cerebrospinal neuroses	0.43	0.49	0.21	0.43
acute epidemic	0.72	0.49	0.47	0.47
senility	0.56	0.50	0.32	0.43
accidental injury	0.32	0.18	0.19	0.38
suicide	0.11	0.09	0.09	
the other case	1.33	1.25	0.96	0.95

(feminine)

congenital adynamia & malformation	0.74	0.50	0.30	0.28
digestive organs disease	1.97	2.28	2.61	1.68



<u>Case of Death</u>	<u>the Lowest</u>	<u>Low</u>	<u>Middle</u>	<u>High</u>
pneumonia	1.45	1.45	1.17	1.12
tuberculosis	1.60	1.31	1.00	0.93
dysentery & summer diar-				
rhoea	0.24	0.37	0.15	0.28
cerebral haemorrhage	1.25	1.45	1.23	1.45
cancer	0.74	0.66	0.55	0.42
nephritis	0.64	0.62	0.51	0.51
syphilis	0.08	0.04	0.04	
beriberi	0.13	0.06	0.02	0.23
meningitis	0.47	0.28	0.49	0.42
respiratory organs				
disease	1.10	1.02	0.91	0.75
circulatory organs				
disease	0.84	0.74	0.72	0.89
psychosis & cerebrospinal				
neuroses	0.26	0.22	0.34	0.09
acute epidemic	0.68	0.39	0.47	0.65
senility	1.00	1.00	1.00	1.07
accidental injury	0.11	0.04	0.06	0.09
suicide	0.08	0.06	0.09	0.05
the other case	1.28	1.42	1.04	1.26



The Table of Tuberculosis observing by Ages.

(per 10,000)

(Masculin)

Class Age	The Lowest	Low	Middle	High
Total	17.6	14.2	9.8	12.8
0 - 4	3.2	2.1	4.0	--
5 - 9	2.5	8.3	--	4.1
10 - 14	4.6	2.2	5.4	7.8
15 - 19	3.2	24.7	12.9	4.3
20 - 24	49.5	39.2	49.9	23.5
25 - 29	37.4	42.8	12.1	40.9
30 - 34	27.8	21.2	3.3	31.0
35 - 39	17.8	13.6	13.1	31.3
40 - 44	20.6	5.6	9.9	7.3
45 - 49	10.5	4.9	3.6	8.6
50 - 54	15.2	11.0	4.1	17.7
55 - 59	9.8	6.4	15.4	12.8
60 - 64	12.2	--	7.0	--
65 - 69	25.4	13.6	--	--
70 - 74	27.7	12.2	--	--
75 - 79	9.8	--	--	--
Over 80	--	--	--	--

(Feminine)

Total	16.0	13.1	10.0	9.3
0 - 4	4.1	--	--	--
5 - 9	4.2	7.5	3.8	4.2
10 - 14	11.7	5.6	15.6	12.3
15 - 19	42.9	41.2	14.8	21.8
20 - 24	40.7	31.2	24.1	10.8
25 - 29	23.5	15.3	13.7	13.4
30 - 34		11.2		
35 - 39		11.2		
40 - 44		11.7		
45 - 49		11.5		
50 - 54		11.3		



Class Age	The Lowest	Low	Middle	High
30 - 34	16.5	16.8	17.5	6.7
35 - 39	14.4	12.2	6.1	14.0
40 - 44	15.9	11.2	3.3	--
45 - 49	11.0	2.7	12.3	8.7
50 - 54	8.1	2.9	4.4	19.5
55 - 59	6.1	9.5	11.3	12.7
60 - 64	9.0	12.3	--	--
65 - 69	8.1	6.4	--	--
70 - 74	11.3	--	15.8	--
75 - 79	--	--	--	--
Over 80	--	--	--	--



The death-rate by tuberculosis is highest between twenty and twenty-nine of masculine, and between fifteen and twenty-five of feminine. This fact is seen in any class, and in masculine high proportion of 40 to 10,000 are in any class, while in feminine the high ones are only in the low and the lowest classes.

From thirty to thirty-nine of the high class masculine, higher death-rate, more than 30 to 10,000, as compared with other classes. It cannot be hastily concluded that this fact is due to less observation or peculiarity of that class.

The Table of Still-birth-rate observing by  
the Income Class

(per 1,000)

Class	The lowest	low	middle	High
	1.28	1.33	0.83	0.57