Tuberculosis Annual Report 2008 Series 4. Elderly TB

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Abstract Although the tuberculosis (TB) incidence rate in Japan reached 19.4 per 100,000 in 2008, the rates among the elderly (65+ yrs) were high, e.g. 29.5 of those aged 64–74 years, 64.2 of those aged 75–84 years and 97.3 of those aged 85 years and over. The trends of incidence rates of elderly TB differed by age group. Since 2000, those aged 65–84 years showed a relatively faster decrease, whereas those aged 85 years and over showed a slower decrease.

The proportion of those aged 65 years and over increased from 36.8% in 1987 to 56.7% in 2008, i.e. an increase of 1.5 times. Especially, the proportion of those aged 80 years and over increased greatly from 7.9% in 1987 to 26.6% in 2008, i.e. an increase of 3.4 times. The proportion of elderly TB differed greatly by prefecture.

According to epidemiological indicators of elderly TB, the proportion of extra-pulmonary TB was larger (24.9%) than that of younger TB patients aged 15–64 years (17.2%). The proportion of bacillary TB among elderly pulmonary TB patients was larger than that of younger pulmonary TB patients, but the proportion of cavitary TB among elderly pulmonary TB patients was smaller than that of younger pulmonary TB patients. The proportion of TB patients having only other symptoms without respiratory symptoms increased with age, e.g. 19.5% of those aged 65–74 years, 23.2% of those aged 75–84 years and 27.5% of those aged 85 and over.

Regarding the delay of case detection among elderly TB patients, the patient's delay tended to be shorter but the doctor's delay was longer. Although most TB patients including elderly TB patients were detected upon visiting a medical institution with some symptoms, in the case of elderly TB more patients were detected as outpatients or inpatients for a disease other than TB.

The prognosis of newly notified TB patients in 2007 was followed up till the end of 2008. Among TB patients aged 65 years and over, 26.4% died within one year and 14.8% died within 3 months. The proportion of death increased with age, and accelerating quickly particularly among those aged 75 years and over.

Key words: Tuberculosis, Incidence, Elderly, Age, Trend, Epidemiological indicator, Death, Prefecture

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人口10万対率 Rate per 100,000

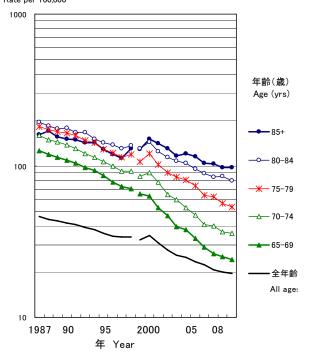


図1 高齢者結核罹患率の推移、1987-2008年 Fig.1 Trend of elderly TB notification rates, 1987-2008

注: 1998年 結核患者届出の定義の変更 Note: New criteria for TB notification in 1998

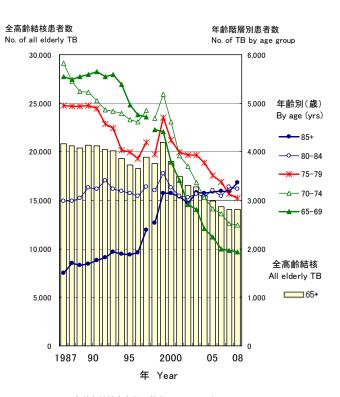


図2 高齢者結核患者数の推移、1987-2008年 Fig.2 Trend of number of newly notified elderly TB cases, 1987-2008

注: 1998年 結核患者届出の定義の変更 Note: New criteria for TB notification in 1998

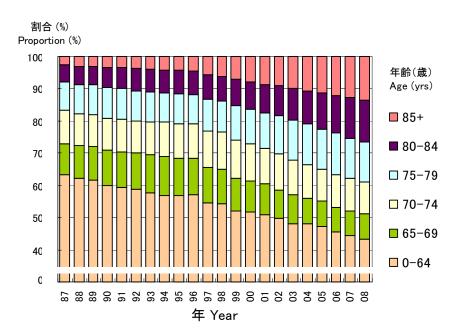


図3 新登録結核患者に占める高齢者結核の割合の推移、1987-2008年 Fig. 3 Trend of proportion of elderly TB among newly notified TB cases of all ages, 1997-2008

表1. 結核患者の性・年齢階級別 疫学指標の比較、2008年

Table 1 Comparison of epidemiological indicators by sex and age group, 2008

			-	年齢(歳) Age (yrs)			
			全年齢 All ages _	若年者 Younger	高齢者 Elderly		
				15-64	65-74	75-84	85+
新登録結核患者数 (n) Number of newly notified TB patients (n)	計	Total	24,760	10,621	4,420	6,265	3,359
	男	Male	15,707	6,834	3,020	3,990	1,811
	女	Female	9,053	3,787	1,400	2,275	1,548
結核罹患率(10万対) TB notification (incidence) rates per 100,000	計	Total	19.4	12.9	29.5	64.2	97.3
	男	Male	25.2	15.7	42.8	98.7	191.8
		Female	13.8	9.3	17.6	39.8	61.7
新登録患者中、肺外結核(%)	計	Total	21.7	17.2	25.8	25.5	22.8
Proportion of extra-pulmonary TB among newly notified TB patients (%)	男	Male	18.5	14.6	21.4	22.1	19.6
notified 1 D patients (70)	女	Female	27.3	22.0	35.3	31.6	26.5
肺結核中、菌陽性(%)	計	Total	81.9	75.7	84.2	87.2	91.5
Proportion of all bacillary TB among pulmonary TB (%)	男	Male	83.1	78.4	84.9	87.0	91.5
		Female	79.6	70.5	82.3	87.4	91.5
肺結核中、喀痰塗抹陽性(%)		Total	50.6	44.2	54.0	55.8	59.7
Proportion of sputum smear positive TB among	男	Male	52.3	47.5	55.0	56.0	60.4
pulmonary TB (%)		Female	47.2	37.6	51.2	55.2	58.9
肺結核中、有空洞 (%) Proportion of all cavitary TB among pulmonary TB (%)	計		34.1	37.9	35.7	30.6	26.0
	男	Male	37.7	42.4	38.7	33.0	27.6
肺結核中、広汎空洞型 (%) Proportion of far-advanced cavitary TB among pulmonary TB (%)	計	Female Total	27.2 1.9	29.1 2.4	28.0	25.9 1.2	24.0 1.2
	男	Male	2.2	3.0	2.2	1.2	0.9
		Female	1.3	1.2	1.7	1.2	1.7
肺結核巾 有症状(%)	計	Total	74.3	66.3	77.2	81.3	85.9
肺結核中、有症状 (%) Proportion of symptomatic TB among pulmonary TB (%)	男	Male	74.9	67.2	77.2	82.2	86.7
		Female	73.0	64.4	77.2	79.5	84.9
有症状肺結核中、呼吸器以外の症状のみ (%) Proportion of only symptoms other than respiratory symptoms among symptomatic pulmonary TB (%)	計	Total	20.3	16.0	19.5	23.2	27.5
	男	Male	19.2	15.7	18.8	22.1	24.6
	女	Female	22.5	16.5	21.6	25.5	31.2
有症状肺結核中、受診の遅れ2か月以上 (%)* Proportion of patient's delay of 2 months or more among symptomatic pulmonary TB (%)*	計	Total	18.2	26.3	17.8	11.6	9.6
	男	Male	18.7	27.5	18.7	11.0	8.6
	女	Female	17.3	24.1	15.3	13.0	11.0
有症状肺結核中、診断の遅れ1か月以上 (%)* Proportion of doctor's delay of 1 month or more among symptomatic pulmonary TB (%)*	計	Total	19.9	16.7	21.9	23.7	19.6
	男	Male	18.7	14.5	21.0	23.7	18.8
	女	Female	22.2	21.1	24.2	23.9	20.7
有症状肺結核中、発見の遅れ3か月以上 (%)* Proportion of total delay of 3 months or more among symptomatic pulmonary TB (%)*		Total	18.1	24.8	18.3	13.0	9.7
	男	Male	18.1	25.3	18.8	11.7	8.7
	-	Female	18.1	23.8	17.2	15.6	11.1
新登録患者中、他疾患通院中の発見(%)	計男	Total	8.5	4.6	12.4	12.5	8.5
Proportion of TB detected as outpatient from other		Male	8.7	4.4	11.8	13.4	9.6
diseases among newly notified TB (%)	<u>女</u> 計	Female	8.1	4.8	13.6	10.9	7.4
新登録患者中、他疾患入院中の発見(%)		Total	10.8	4.3	11.7	16.4	20.1
Proportion of TB detected as inpatient from other diseases among newly notified TB (%)	男	Male	10.5	5.0	11.2	15.8	18.9
	女	Female	11.3	3.0	13.0	17.5	21.6

対象: * 遅れ期間不明を除く Subjects: * Excluding cases of unknown delay

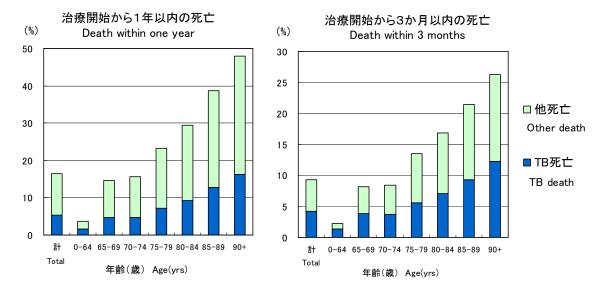


図4. 2007年新登録結核患者の年齢階層別、死因別、死亡までの期間別死亡割合、2008年 Fig.4 Proportion of death among newly notified TB patients in 2007 by age group, cause of death and duration till death at the end of 2008

表2 新登録結核患者中高齢結核者数および割合、都道府県・政令指定都市・東京23区別、2008年

Table 2 Number and proportion of elderly TB by prefecture and city, 2008

65歳以上			85歳以上	85+ (yrs)	
地域 Area	n	%	地域 Area	п	%
全国 Japan	14, 044	56. 7	全国 Japan	3, 359	13. 6
Щ□ Yamaguchi	198	76. 2	島根 Shimane	37	28. 9
香川 Kagawa	158	75.6	鳥取 Tottori	22	26.8
静岡市 Shizuoka city	102	75.6	新潟市 Niigata city	27	26.5
熊本 Kumamoto	259	75. 3	富山 Toyama	37	23.0
徳島 Tokushima	135	75.0	石川 Ishikawa	39	22. 9
北海道 Hokkaido	358	74.9	長野 Nagano	50	22.6
佐賀 Saga	114	73. 1	山梨 Yamanashi	22	22. 4
秋田 Akita	94	72.9	静岡市 Shizuoka city	30	22. 2
長崎 Nagasaki	257	72.6	秋田 Akita	27	20.9
山梨 Yamanashi	71	72.4	宮崎 Miyazaki	40	20. 7
長野 Nagano	158	71.5	滋賀 Shiga	49	20.0
富山 Toyama	115	71.4	福岡 Fukuoka	104	19.8
新潟市 Niigata city	71	69.6	熊本 Kumamoto	67	19.5
岐阜 Gifu	288	69.6	京都市 Kyoto city	65	19.3
島根 Shimane	89	69. 5	群馬 Gunma	48	19.3
· 		47.1	• +		
大阪市 Osaka city	632	47. 1	神戸市 Kobe city	47	11.3
神奈川 Kanagawa	297	46.6	大阪 Osaka	135	10.4
福岡市 Fukuoka city	140	46. 5	千葉 Chiba	93	10. 1
横浜市 Yokohama city	307	45. 4	神奈川 Kanagawa	58	9. 1
埼玉 Saitama	425	43. 9	川崎市 Kawasaki city	28	8. 9
千葉 Chiba	399	43. 3	東京都23区 Tokyo 23 wards		8. 2
東京都23区 Tokyo 23 wards	1, 034	41.4	さいたま市 Saitama city	17	7. 5
川崎市 Kawasaki city	130	41.3	埼玉 Saitama	66	6.8
千葉市 Chiba city	73	41. 2	千葉市 Chiba city	12	6.8
さいたま市 Saitama city	92	40.5	大阪市 Osaka city	90	6. 7

高齢結核患者割合による高順位

Descending order by proportion of elderly TB patients