

AGE INCIDENCE OF PULMONARY TUBERCULOSIS IN JOHANNESBURG

A. H. SMITH, M.B., Ch.B., D.P.H., D.T.M. & H., *Assistant Medical Officer of Health, Johannesburg*

In a recent paper¹ on this subject Shee drew attention to a statistically significant rise in the age incidence of newly diagnosed cases of pulmonary tuberculosis in European males and females in Bulawayo, during the period January 1959-April 1960.

The average age of 55 European patients during the period 1953-1958 was 42 years and the average age of 20 patients diagnosed in 1959 and the first 4 months of 1960 was 59 years.

The question of a similar trend or sudden change in other parts of Africa was raised. In Johannesburg this sudden increase in age incidence has not been experienced, but a review of the ages of newly notified patients at various periods reveals much of interest to those associated with the control of pulmonary tuberculosis.

Tables I and II show the essential data for Europeans.

It is significant to note that while the average age of the males was 41 years that of the females was only 29 years, and

Here we see that the average age of the males was 33 years and that of the females was 19 years. Of the males, 65% were over 30 years of age, while of the females only 25%

TABLE IV. AVERAGE AGE OF THOSE NOTIFIED AMONG THE BANTU IN VARIOUS AGE GROUPS

Year	Average age of those 30 years and over		Average age of those under 30 years		Average age of those 65 years and over	
	M	F	M	F	M	F
	(yrs.)	(yrs.)	(yrs.)	(yrs.)	(yrs.)	(yrs.)
1944 ..	41	40	20	14	68	70
1950 ..	43	39	15	14	72	65
1960 ..	44	40	13	9	71	—
1961 ..	47	39	11	9	71	—

TABLE I. DATA CONCERNING NOTIFICATIONS AMONG EUROPEANS IN JOHANNESBURG

Year	Consecutive notifications		Average age		30 years and over		% 30 years and over		65 years and over		% 65 years and over	
	M	F	M	F	M	F	M	F	M	F	M	F
	(no.)	(no.)	(yrs.)	(yrs.)	(no.)	(no.)	%	%	(no.)	(no.)	%	%
1944	150	100	39	30	107	47	71	47	21	6	14	6
1950	146	100	41	28	102	44	69	44	17	2	12	2
1960	150	100	41	27	102	47	68	47	29	11	19	11
1961	131	71	42	29	90	35	68	49	28	7	21	10

that this difference remained consistent over the years. During all periods 69% of the males notified were over 30 years of age while only 47% of the females were over 30 years. Approximately 17% of the males notified were 65 years or over, compared with 7% of the females notified.

Tables III and IV show the essential data for the Bantu.

TABLE II. AVERAGE AGE OF THOSE NOTIFIED AMONG THE EUROPEANS IN VARIOUS AGE GROUPS

Year	Average age of those 30 years and over		Average age of those under 30 years		Average age of those 65 years and over	
	M	F	M	F	M	F
	(yrs.)	(yrs.)	(yrs.)	(yrs.)	(yrs.)	(yrs.)
1944 ..	49	45	14	16	71	71
1950 ..	50	41	21	18	70	77
1960 ..	55	51	11	7	72	72
1961 ..	55	49	13	10	75	73

were over this age. Only 3.8% of the males and 0.5% of the females were over the age of 65 years.

DISCUSSION

While the average ages, the percentage over 30 years, and the percentage over 65 years, were significantly higher in both European and Bantu males than females, it is interesting to note that the difference in average ages between European males and females was approximately the same as the difference between the average ages of Bantu males and females. Yet the percentage of Bantu males over 30 years was far greater than the female percentage, and this difference was more marked than in the Europeans, i.e. 65% as to 25% in the Bantu, and 69% as to 47% in the European.

Johannesburg has a comprehensive tuberculosis-control organization. The facilities available are more or less equal for all races; in the case of the Bantu male population they may even be better, since in this group all work-seekers in the city are X-rayed as a routine; this in all probability ex-

TABLE III. DATA CONCERNING NOTIFICATIONS AMONG BANTU IN JOHANNESBURG

Year	Consecutive notifications		Average age		30 years and over		% 30 years and over		65 years and over		% 65 years and over	
	M	F	M	F	M	F	M	F	M	F	M	F
	(no.)	(no.)	(yrs.)	(yrs.)	(no.)	(no.)	%	%	(no.)	(no.)	%	%
1944	150	150	34	23	106	49	71	33	2	2	1.3	1.3
1950	150	150	31	20	88	36	59	24	3	1	2.0	0.7
1960	150	150	34	16	100	32	67	21	7	0	4.7	0.0
1961	150	150	33	16	92	35	61	23	11	0	7.0	0.0

plains the lower average age of notification of the Bantu male and the great difference in the percentage over 30 years compared with the female, who is not X-rayed in this way.

There is evidence that the average age at notification is moving slowly upwards in the European male and downwards in the Bantu female, while the European female and Bantu male remain much the same. No explanation is offered for this apparently anomalous trend.

The percentage of European males and females and Bantu males over 65 years appears to be increasing, but by no means as dramatically as has been described in Bulawayo. The figure for Bantu females is falling so much, however, that in the last 3 groups reviewed there was only one Bantu female aged 65 years out of 450 notifications.

SUMMARY

1. The average age at time of notification of European patients with pulmonary tuberculosis in Bulawayo has increased from 42 years to 59 years over a short period.

2. The average ages at time of notification in Johannesburg are reviewed and show that the European male age has risen from 39 years in 1944 to 42 years in 1961; the European female age has remained at 29 years; the Bantu male age has remained at 33 years; and the Bantu female age has fallen from 23 years to 16 years.

I thank Dr. J. W. Scott Millar, Medical Officer of Health of Johannesburg, for permission to publish.

REFERENCE

1. Shee, J. C. (1961): *Cent. Afr. Med.*, 7, 322.