TUBERCULOSIS IN THE NORTH-WESTERN CAPE PROVINCE

L. W. OSBURN, M.B., B.CH.

Union Health Department, Tuberculosis Section

During the period February to June 1955, mobile X-ray facilities were placed at the disposal of local authorities in the North-Western Cape Province for the detection of cases of pulmonary tuberculosis.

The area covered by the unit, is roughly a rectangle contained by the towns of Port Nolloth and Springbok in the north, Mamre and Wolseley in the south, the coast (with small fishing villages) in the west, and Porterville, Clanwilliam, Van Rhynsdorp and Bitterfontein in the East.

It was hoped that some comparison could be made between coastal and inland groups of people, but this was found to be statistically impracticable.

Unselected volunteers, of all ages and racial groups

and of both sexes, were X-rayed at their own request. The tour was neither intended nor designed as a survey. No attempt has therefore been made to compare the population X-rayed with population distributions reflected in census figures. X-ray totals have not been set out to represent population samples, and it is not suggested that the findings reported reflect the prevalence rates of tuberculosis in the area.

Analysis of the findings have been made on the basis of 10-year age-groups. Five-year groups would have been preferable, but it was observed that confusion existed regarding their ages on the part of non-Europeans, even apparently intelligent and often educated non-Europeans. For the majority of non-Europeans,

| Age Group years | | European | | | | Coloured | | | | Native | | | | |
|-----------------|----------|----------|--------------------------|----------|---------|----------|-----|-----|------|--------|-------------|-------|------|----------|
| | | 1 | . 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | |
| 0-9 | | | | | <u></u> | 1-5 | 0 | 0 | 0 | 0 | | | | |
| 10-19 | | | 1997 - <u></u> 1997 | 2 | 4 | 3 | 3 | 14 | 99 | 26 | | | 5 | 1 - 12 C |
| 20-29 | 5. C. A. | | | 3 | 4 | 2 | 3 | 10 | 127 | 70 | 4 | 1 | 23 | 2 |
| 30-39 | 12 | | 1. 1. <u>1. 1.</u> 1. 1. | 4 | 4 | 1 | 2 | 14 | 84 | 35 | 5 | 2 | 18 | |
| 40-49 | | 1 | | 1 | 5 | 1 | 5 | 10 | 79 | 16 | · · · · · · | 2 | 13 | |
| 50-59 | | 1 | | 1 | 4 | - 1 | 1 | 1 | 59 | 9 | 1 | | 6 | |
| 60-69 | | 600 | 1999 <u>- 1</u> 992 | i | 3 | | 2 | 1 | 44 | 6 | 1 4 1 8 | | 3 | |
| 70+ | | | | <u> </u> | 2 | — | 2 | | 30 | 3 | | 2 - S | - | S |
| TOTALS | | 3.0 | 0 | 12 | 26 | 7 | 18 | 50 | 522 | 165 | 10 | 5 | 68 | 2 |
| PERCENTAGE | | 4 | Ō | 26.7 | 57.8 | 15.5 | 2.4 | 6.6 | 69.1 | 21.9 | 11.8 | 5.9 | 79.9 | 2.4 |

| TARIFI | CLASSIFICATION OF | CASES INTO | TYPE OF | DISFASE | PROCESS | BY RACE | AND | AGE |
|----------|-------------------|-------------|---------|---------|---------|---------|-----|-----|
| IADLL I. | CLASSIFICATION OF | CHOLD HILLO | TTTT OI | DISCHOL | INCOLDO | DI KACL | min | AUL |

1. Pleural effusion.

3. Tuberculous densities.

2. Primary or minimal lesion.

4. Densities with cavitation.

including school children, the age is simply an estimate by the observer.

Criteria for Diagnosis

It was impracticable to take large X-ray plates or make sputum tests in suspect cases; diagnosis rested solely on the radiological appearance of the 70 mm. miniature film. Patients were diagnosed as having active tuberculosis if their X-ray plates presented certain characteristic features, viz.

1. Pleural effusion.

2. Primary or minimal tuberculosis.

3. Unilateral or bilateral pulmonary densities having the usual appearance and distribution of tuberculosis.

4. Pulmonary densities with cavitation.

Films on which no certain opinion could be given were listed for 'further investigation' and are not included in these positive findings.

Classification of all positive cases into these 4 groups is given in Table I, and by race, sex and age in Table II.

SUMMARY

During a mobile X-ray tour of the North-Western Cape Province, active tuberculosis was detected radio-logically to the extent of: Europeans 0.5%, Coloured 3.1%, Natives 1.4%.

Statistical tables are presented.

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TABLE II. DISTRIBUTION OF CASES BY RACE, SEX AND AGE

| Age-Group | P. Star | European . | | | Coloured | | Native | | | |
|--------------------------|---------|--------------|-------|---------------------------------------|----------|--------|--------------|------|-------|--|
| (years) | M | F | Total | М | F | Total | M | F | Total | |
| 0–9 | 1.1.1. | Constant and | | S. Mark | | | an Alexandre | | | |
| X-raved | 152 | 126 | 278 | 223 | 209 | 432 | 3 | 4 | 7 | |
| Tuberculosis cases | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| % " " | 0 | 0 | 0 | · · · · · · · · · · · · · · · · · · · | 0 | 0 | 0 | 0 | 0 | |
| X-raved | 2.219 | 1.778 | 3,997 | 3.972 | 4,297 | 8,269 | 316 | 24 | 340 | |
| Tuberculosis cases | 6 | 3 | 9 | 66 | 76 | 142 | 2 | 3 | 5 | |
| % " " " · · · · | 0.2 | 0.2 | 0.2 | 1.7 | 1.8 | 1.7 | 0.6 | 12.5 | 1.4 | |
| X-raved | 686 | 679 | 1.365 | 2.659 | 2.845 | 5,504 | 2.479 | 66 | 2.545 | |
| Tuberculosis cases | 3 | 6 | 9 | 107 | 103 | 210 | 28 | 2 | 30 | |
| % ", <u>30–39</u> ··· ·· | 0.4 | 0.9 | 0.6 | 4.0 | 3.6 | 3.8 | 1.1 | 3.0 | 1.1 | |
| X-raved | 703 | 576 | 1 279 | 1 819 | 1 952 | 3 771 | 1.928 | ' 56 | 1 984 | |
| Tuberculosis cases | 3 | 6 | 9 | 75 | 60 | 135 | 25 | Ó | 25 | |
| "% ", <u>40–49</u> | 0.4 | 1.0 | 0.7 | 4.1 | 3.1 | 3.6 | 1.3 | Ŏ | 1.2 | |
| X-raved | 540 | 350 | 890 | 1.254 | 1.340 | 2.594 | 726 | 33 | 759 | |
| Tuberculosis cases | 3 | 3 | 6 | 67 | 43 | 110 | 14 | 1 | 15 | |
| % , <u>50–59</u> | 0.5 | 0.9 | 0.7 | 5.3 | 3.2 | 4.2 | 1.9 | 3.0 | 1.9 | |
| X-raved | 351 | 193 | 544 | 825 | 872 | 1.697 | 231 | 12 | 243 | |
| Tuberculosis cases | 5 | 1 | 6 | 37 | 33 | 70 | 5 | 2 | 7 | |
| % " " | 1.4 | 0.5 | 1.1 | 4.5 | 3.7 | 4.1 | 2.2 | 16.7 | 2.9 | |
| X-raved | 189 | 63 | 252 | 643 | 596 | 1.239 | 49 | 8 | - 57 | |
| Tuberculosis cases | 2 | 2 | 4 | 34 | 19 | 53 | Î Î | 2 | 3 | |
| % ,, ,, | 1.1 | 3.5 | 1.6 | 5.3 | 3.2 | 4.2 | 2.0 | 25.0 | 5.2 | |
| X-raved | 72 | 27 | 99 | 414 | 278 | 692 | 13 | . 2 | 15 | |
| Tuberculosis cases | 2 | 0 | 2 | 26 | . 9 | 35 | .0 ^ | Ō | 0 | |
| % ,, ,, | 2.8 | ŏ | 2.0 | 6.3 | 3.2 | 5.1 | Õ | Õ | Ő | |
| X-raved | 4.912 | 3,792 | 8,704 | 11.809 | 12,389 | 24,198 | 5,745 | 205 | 5,950 | |
| Tuberculosis cases | 24 | 21 | 45 | 412 | 343 | 755 | 75 | 10 | 85 | |
| | 0.5 | 0.6 | 0.5 | 3.5 | 2.8 | 3.1 | 1.3 | 4.9 | 1.4 | |