

Dr. Keith, Nelson, reports on the examination of thirty-seven candidates as probationers (thirty-two girls and five boys). Fourteen were classified as excellent, sixteen average, one fair, and one was deferred for twelve months. Twenty-eight had good teeth; four of the girls had defective vision, two of them were wearing glasses. One girl showed a slight mitral systolic murmur. Of the boys, two were classified excellent and three average. One had dental caries, and two slight nasal obstruction.

The high percentage of secondary-school pupils showing remediable defect furnishes a strong argument in favour of routine medical inspection of secondary schools.

TUBERCULOSIS: NEW ZEALAND SCHOOL-CHILDREN.

Incidence.—The total incidence of tuberculosis in 60,275 children examined by School Medical Officers in the year 1927 was 0·1 per cent., of which 0·04 per cent. was pulmonary and 0·06 per cent. tuberculosis of other tissues than pulmonary. This percentage is in accordance with that found in previous years. School medical reports from abroad show that tuberculosis (in a diagnosable form) is rarely found during the routine examination of school-children. The annual report of the County Medical Officer of Health and School Medical Officer, London County Council, for the year 1926, says, "Pulmonary tuberculosis was detected in only 102 children (0·1 per cent.) and other forms of tuberculosis in 126 children. It is thus now quite rare to find tuberculosis at routine medical inspection in schools. It is satisfactory to note that children suffering from more serious diseases, such as tuberculosis, are detected and dealt with as they arise, and do not remain overlooked in school waiting until the time comes for their routine inspections in the age groups." The report of the Principal School Medical Officer, Education Department, Victoria (year 1925–26), states, "In 1923, at the request of the Director-General of the Commonwealth Health Department, every School Medical Officer was asked for six months to keep careful notes of all cases of tuberculosis or cases of suspicious tuberculosis. Even when carefully looked for, only two cases of apparently tubercular glands and five cases of chest conditions, probably tuberculous, were found among 7,000 children, but no case of tuberculous joint-disease was amongst this number."

In our annual report for 1927 the percentage of children showing evidence of subnormal nutrition is given as 7·14. This is consistent with the findings of other years. In view of the modern opinion that tubercular infection is almost universal before adolescence, it appears certain that a considerable percentage of school-children now classified by School Medical Officers as of subnormal nutrition have latent tuberculosis. A special investigation, therefore, was carried out into the incidence of tuberculosis in New Zealand school-children in the year 1926 by Dr. Mary Champtaloup, Wellington, and Dr. Baker-McLaglan, Canterbury. The results of this investigation were embodied in a paper given by Dr. Champtaloup at a meeting of the Australasian Medical Association in Dunedin, 1927, and quoted in last year's report. The investigation consisted of a general medical examination, supplemented, where indicated, by special expert methods of diagnosis—e.g., X ray examination, examination by tuberculosis specialist. Moro's inunction test was used as an aid to diagnosis. The following is a quotation from Dr. Champtaloup's paper, "Observations on Incidence":—

"Of the whole group tested, 14·1 per cent. gave a positive reaction . . . only 8·3 per cent. of European country children were positive, as against 15·8 per cent. in town—nearly double. Maori figures were much higher: 25 per cent. of these—all of whom lived in the country—gave a positive reaction. . . . A study of other data for New Zealand shows that the figures so obtained are trustworthy. In 1913–14, 383 hospital children, each under fifteen years, were given the Von Pirquet test, 24 per cent. being positive. This figure is doubtless higher than in the case of healthy children. New Zealand post-mortem records for the past ten years have been carefully studied with a view to ascertaining the amount of tuberculosis. For children between five and fifteen—that is the age group used in the Moro tests—the total incidence of tuberculosis was 28·2 per cent. Excluding deaths directly due to tuberculosis, the figure was 14·1 per cent. This figure represents tubercular lesions in children dying of other causes, and corresponds to the amount of tuberculosis one expects to find in the supposedly non-tubercular school-child. It is interesting to note that this figure—14·1 per cent.—is exactly equal to that indicated by the Moro test for the whole group of children tested. Analysing the lesions shown in post-mortem in those dying of other causes, 94 per cent. had tubercular glands—abdominal, thoracic, or cervical. Of those dying of tuberculosis, 70 per cent. showed mainly an acute or subacute illness associated with caseating or calcifying glands. Hence the obvious importance of taking these school-children with their very probable glandular lesions and so treating them as to obviate any further development of disease."

Further Findings: Dr. Baker-McLaglan.—The group of children found to give a positive Moro reaction in Christchurch during the investigation of 1926 has been kept under continuous observation by Dr. Baker-McLaglan ever since. Definite tuberculosis of the lungs was found in two cases, but twelve have chests which are to be "watched carefully." A regular process of inunction with Moro ointment was carried out for the Moro positive group of children with the object of obtaining immunization. The group diminished in size somewhat during the year owing to the usual custom of New Zealand children of wandering from place to place. There remained, however, a group of twenty-five boys and twenty-eight girls who received regular inunction with the Moro ointment. Regular physical examinations, including height and weight measurements of these children, were observed. Dr. Baker-McLaglan's conclusions are as follows: "Thus with both boys and girls in group 1 (standard weight for height) and group 2 (above the standard) progress is satisfactory or excellent, but in groups 3 and 4 (the lower standard) progress, with few exceptions, is unsatisfactory." Dr. Baker-McLaglan gathers from this that children who are above or of equal standard weight for height will probably continue satisfactorily; children below standard weight for height, even only a few points, will for the most part do but passably at best; while those 10 per cent. below standard weight for height one may expect to get worse. It