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As was the case last year, the output of school dental nurses from the Training School has again been rather more than sufficient to make good current wastage, but not sufficient to augment the field staff to the extent that is necessary to deal effectively with the increased school population. The urgent need for more staff has already been dealt with in another section of this report.

The number of children under regular treatment is 235,746, an increase of 1,765 during the year. The number of schools receiving treatment is 2,333, as compared with

2,331 at the end of the previous year.

The total number of operations for the year was 1,674,125. This included 1,045,191 reparative fillings in both permanent and deciduous teeth and 94,538 preventive fillings, a total of 1,139,729 fillings. In contrast with this figure, which represents approximately the number of teeth preserved for useful service, the number of teeth removed as unsaveable (or in some cases to relieve overcrowding) was 69,718, a ratio of 6·12 extractions to every 100 fillings.

## DENTAL RESEARCH

The Field Dental Research Officer attached to the Dental Division has continued his study of regional variations in the incidence of dental caries in New Zealand, and has also been associated with certain studies undertaken by the Division in connection with the control of dental caries. These include the topical application of sodium fluoride to children's teeth, and also the regulation of carbohydrate intake in the diet. The former showed an encouraging result, which was comparable with those obtained in the United States, where this form of preventive treatment has been shown to result in a 40-per-cent. reduction in the incidence of dental caries. Full reports on the various research activities are being published in the appropriate scientific and professional journals.

## DENTAL BURSARIES

At the beginning of 1949, 21 new bursaries were awarded to dental students. Of the bursaries granted in previous years, 57 were renewed, 11 were suspended temporarily, and 1 was terminated. The total number of bursaries held as at the 31st March, 1949 (including those temporarily suspended), was 89. Twenty-one holders of bursaries graduated in 1948, and, of these, 9 are now on the staff of the Dental Division, 3 are on the staff of hospitals, 2 are serving with the Royal New Zealand Army Dental Corps, and 3 were appointed to Demonstratorships at the Otago University Dental School for one year. Four failed to undertake the service prescribed in the bursary agreement, and the penalties provided for in the agreement were imposed in each case.

## HEALTH EDUCATION

Emphasis is still being placed on the preventive side of the school dental nurses' work, and there has been a marked increase during the past year in the volume of such type of work performed. Health education activities totalled 16,848. New material prepared during the year for health education work comprised a sound film on care of the teeth, a coloured film strip, a complete set of six animal posters, a completely new dental section in the Department's Health Exhibition, and a supply of new teaching aids for use in class-rooms and clinics. A course of instruction in dental health education continues to be given to student dental nurses at the Dominion Training School as a routine part of their training, and post-graduate instruction for nurses in the field has also been conducted. The health education staff continues to be responsible for the publication of the School Dental Service Gazette.