

should eliminate those dangers; but the responsibility for enforcing strict compliance must of necessity be more with the practitioners using these hospitals, as they are able to watch methods infinitely more closely than inspecting officers of the Health Department. I should be relieved of much anxiety if these mixed hospitals were unnecessary.

*Summary of Returns of Maternity Cases.*—Returns from 277 maternity hospitals have been received, each hospital giving the number of confinements (natural and instrumental), cases of hæmorrhage (unavoidable and post-partum) cases of eclampsia, morbidity, and sepsis.

The total births for New Zealand for 1926 was 28,473, representing approximately 28,160 confinements. Of these, 2,124 were confined at St. Helens Hospitals as in-patients, 3,271 at public maternity hospitals or in maternity wards attached to public hospitals under Hospital Boards, and 11,006 in private hospitals, making a total of 16,431 confinements in all maternity hospitals or wards, while approximately 11,739 were confined in their own homes. Of these latter, 605 were attended by St. Helens Hospital midwives or nursed by St. Helens Hospital maternity nurses as out-patients.

The figures shown above prove the importance of attaining a high degree of efficiency in the conduct, equipment, and management of maternity hospitals.

As complete returns of natural and instrumental births and cases of hæmorrhage, eclampsia, and morbidity are only obtainable for hospital cases, no comparison of results between these cases and those attended in their own homes is possible. Some useful comparisons between the methods adopted at different hospitals are, however, possible.

Morbidity returns are obviously useless under the present system, and this is found to be the case in all other countries as far as I am aware. "Morbidity" is defined at present as a temperature of 100° or over on any two occasions. The lowering of a recorded temperature from 100° to 99·8° on the next occasion excludes that case from being a "morbidity," though it is obvious from the practical point of view that there is no difference between that and a case showing 100° on two occasions. It is significant that the examination of many thousands of charts by myself compels me to face the fact that an extraordinarily large proportion of patients escape being classified as "morbidity" by 0·2° or 0·4° in their temperature on the second and subsequent occasions.

The records of instrumental deliveries in maternity hospitals show immense variation in practice, and from these some very definite conclusions may be drawn. Taking two hospitals out of a group of hospitals having over 150 cases per year, both of which are catering for the same class of patients and all of whom are attended by their own medical attendants, I find that in one hospital the instrumental deliveries amounted to 3·42 per cent., while in the other the instrumental deliveries amounted to 32·7 per cent.

Statistical figures are an excellent indication for critical inquiry, and their value depends largely upon the results of that inquiry. The instance of the low percentage of instrumental deliveries in the private hospital quoted above I have no hesitation in accepting as correct, and in supporting the opinion of the matron, which ascribed it to the use of the chloroform administered by the "Murphy" inhaler to produce analgesia or anæsthesia to the obstetrical degree. I have always contended that a larger number of instrumental deliveries were forced upon medical attendants by the natural, if sometimes unreasonable, demand for the relief of pain inevitable to parturition, and no doubt more keenly felt in highly civilized women. Satisfying this demand by the use of chloroform in proper manner removes the urge to the improper use of forceps, and so far is a gain to the patient and to the practitioner in preventing undue pressure being put upon him to use a means of hastening delivery and alleviating pain which he knows at heart is unsound practice. The result quoted above seems to me to amply justify the innovation of training midwives and maternity nurses in the administration of chloroform by means of the "Murphy" inhaler, which they may only use by direction of the medical attendant responsible for the confinement. It is to be hoped that medical men will accept and promote the use of chloroform by maternity nurses in their practices.

*Statistical Returns.*—The total deaths from puerperal cases for the last five years were as follows: 1922, 149; 1923, 143; 1924, 140; 1925, 131; 1926, 121—showing an appreciable decrease, which, if not fully satisfying, is at least encouraging. In 1923 the deaths were 5·11 per 1,000; in 1924, 5 per 1,000; in 1925, 4·65 per 1,000; in 1926, 4·25 per 1,000. The reductions, therefore, in the last three years, since the efforts of the Department and the medical profession were co-ordinated in an effort to improve maternity conditions, have resulted in a reduction of ·86 per 1,000—i.e., 16·83 per cent. of deaths which formerly occurred have been prevented.

Taking the maternal deaths from the Government Statistician's report, and grouping the cases as follows, the results for the last five years 1922 to 1926 are as follows: Accidents of pregnancy and labour are 48, 47, 40, 41, 38; for puerperal septicæmia, 52, 52, 52, 42, 39; puerperal albuminuria and eclampsia, 35, 34, 36, 32, 31. These figures show that the most marked decline in causes of death was in puerperal septicæmia, showing that the efforts made by the Health Department in co-operation with practising members of the medical profession to reduce puerperal sepsis has had encouraging results. As I have pointed out on previous occasions, the reduction of puerperal sepsis needs organized effort besides the individual effort of the medical attendant. The same may be said of the deaths due to eclampsia, and, as has been pointed out in an earlier part of this report, the organization of public ante-natal clinics shows what may be attained in further reducing this class of maternal mortality. Prevention of deaths from accidents of pregnancy and of labour, including hæmorrhage, are mostly a matter of individual skill and knowledge on the part of the medical attendant; but in this class, again, ante-natal care, by enabling the danger to be foreseen, will enable the attendant to be forearmed and to make use of well-equipped maternity hospitals for cases showing signs that special treatment is required, so that even here organized effort is necessary.

*Work for the coming Year.*—During the coming year I hope to find sufficient time for more efficient field research into the causes of maternal mortality than I have had in the past. Hand-in-hand with