

It will also be noticed that the number of sterilized maternity outfits is showing a gradual increase, which emphasizes my remarks with regard to the more general acceptance of asepsis in obstetric practice.

In view of the fact that maternal mortality in rural districts compares unfavourably with that in urban districts, particularly as regards eclampsia, the need of the extension of these clinics as an organized method of giving systematic and skilled ante-natal care to expectant mothers is brought home to one.

The statistical record shows that the rural maternal mortality from eclampsia and allied conditions is approximately 50 per cent. greater than in towns where there are better facilities for systematic ante-natal care and the difficulty of the patient in availing herself of these facilities is less. With a view to remedying this condition by spreading the knowledge of what systematic ante-natal care will do towards this and other causes of maternal mortality, addresses on this subject to various women's societies have been given, and I wish to express my thanks to all those who have given me the opportunity of bringing this important subject to the notice of their members, and to the secretary and many members of the Obstetrical Society who have co-operated in this work. My thanks are due particularly to the Women's Division of the Farmers' Union, whose many local branches held a "Mothers' Welfare Week" recently, and to many branches of the League of Mothers, who gave me the opportunity of addressing them on this subject; also to the Plunket Society for the continuation and extension of ante-natal clinics.

*Puerperal Sepsis.*—This cause of illness and mortality still looms very large in the maternal-mortality returns. One hundred and eighty-four cases of puerperal sepsis were notified to this Department during the year, and the tables published by the Government Statistician show that forty-three cases due to puerperal sepsis following labour, but excluding cases of septic abortion, occurred in 1928, which, though I am glad to say was a reduction in number from the sixty-one cases in 1927, is still the largest cause of all the groups of conditions causing maternal mortality as provided by the Government Statistician.

Last year an extension of research into the conditions governing the causes and consequences of this condition was made. Within the limits of time and opportunity available, all Medical Officers of Health in New Zealand have co-operated with me in the collection and examination of certain aspects of 174 cases of puerperal sepsis reported to them. Of these, 158 cases are among the Europeans and sixteen cases among Maoris. Of the 158 European cases investigated, 126 cases recovered, twenty-eight died, and in four the result was not stated. Of the sixteen cases among Maoris, eight cases recovered, six died, and in two cases the final result was not stated. It is probable that only the most serious of the Maori cases were reported, which would account for the high mortality.

The inquiry form has over twenty headings, and is designed to ultimately gain statistical information which it is hoped will have an important bearing in elucidating the underlying causes of this condition. So far the number of cases investigated is not sufficient to make it possible to draw any definite conclusions. This is particularly so as, owing to the large number of observers making the returns, the personal factor in giving more or less weight to various symptoms, or to the standard of asepsis, the presence or not of abnormality, &c., must have a big influence in the conclusions come to. The following facts, however, are interesting:—

Pregnancy was returned as being normal in ninety-four and abnormal in fifty-four of 148 cases.

Labour was returned as normal in seventy-nine and abnormal in seventy-six of 155 cases.

Delivery of the infant was spontaneous in 100 and artificial in fifty-five of 155 cases.

Delivery of the placenta was spontaneous in 129 and manual in twenty-five of 154 cases.

Approximately 66 per cent. of the cases occurred in licensed or public hospitals and 33 per cent. in private houses, which corresponds very closely to the proportion of the confinements which took place in hospitals and private houses in 1928.

The day of onset as given in 152 cases is of some interest; but in considering these figures it must be borne in mind that the personal factor looms very large in this connection, there being no means of accurately determining the day of onset, and the interpretation of signs and symptoms varying greatly with different observers.

The average day of onset of infection after the confinement as estimated in 154 cases was 6.5 days.

Dividing the cases up into two groups, in the first we get 127 cases beginning on the seventh day or earlier, the mortality for these cases being 13.6 per cent. In the second group, of twenty-seven cases, in which the day of onset is estimated as from the eighth to the twentieth day, the mortality is 22.2 per cent.

It will be of importance in the continuation of this research to determine whether these figures are borne out by subsequent inquiries, and, if so, to determine whether the higher mortality among those reported as being infected late is due to a greater danger consequent upon late infection, or is it rather that detection of the infection, and consequently treatment, was delayed beyond the actual day of onset.

The duration of the illness in each case supplies interesting figures, and within the limits of the investigation, which in most cases terminated on the twenty-eighth day, is probably more accurately informative than those showing the period of onset. In the twenty-six cases that died the average