

of milk, in order to safeguard the health and well-being of her infant, and of leafy vegetables, which serve the twofold function of a protective food and of greatly aiding intestinal elimination.

In order to supply expectant mothers with information regarding diet, sample menus are distributed, and a pamphlet on diet and cookery-book for mothers is compiled. Lectures are given on the subject, and model diets are displayed for the guidance of prospective mothers.

X-RAY EXAMINATION.

Arrangements have been made with the Wellington, Auckland, and Christchurch Hospital Boards whereby patients attending the State maternity hospitals' ante-natal clinics will have the advantage of an X-ray examination when necessary.

As an aid in diagnosis X-ray examination has proved of great advantage. Thirteen cases were sent for examination during the year, and the following conditions were diagnosed: Anencephaly, foetal death, hydrocephalus, multiple pregnancy, malformation of foetal skeleton, and changes found by pelvimetry.

Obstetrical roentgenology has not progressed as rapidly as other branches of the X-ray work, owing to the lack of physical instruments necessary for rapid exposures and brilliant roentgenograms, and the fear of causing damage to the foetus. We are now assured that with the use of modern intensifying-screens, and superspeed duplitized films requiring only a few seconds' exposure, there is no danger either to mother or child.

In many clinics abroad X-ray examination is almost a routine procedure in all cases suspected of variation from a normal pregnancy, either from the standpoint of the foetus or of the bony conformation of the maternal pelvis. Since the foetal skeleton can be detected as early as the eighteenth week of pregnancy by X-ray examination, it is regarded as one of the positive signs of pregnancy, and serves to differentiate pregnancy from uterine or ovarian tumors. The roentgen examination is also of value in pseudocyesis, both as an aid to diagnosis and in convincing the patient that pregnancy is not present.

Death of the foetus: Overlapping of the foetal bones is a pathognomonic sign of intra-uterine death. The decreased size of the foetal head from post-mortem shrinking can be determined by overlapping of the cranial bones.

Pelvimetry by X-ray examination: There is a very definite field for this work, especially in cases of pelvic deformity. In order to forewarn obstetricians all cases with pelvic deformity should be examined at the thirty-sixth week of pregnancy, so that the relative size of the foetal head and pelvic opening can be compared. By this method an accurate diagnosis can be made without the aid of an anæsthetic and internal examination.

BREAST FEEDING AND HELIOTHERAPY.

Among the most important lectures and talks to mothers are those concerned with infant-feeding. It is always impressed on the mothers that nature's provision for the baby is the best, and every mother should suckle her baby.

All mothers attending the clinic are instructed in the preparation of their breasts, and a certain number of mothers with a history of failing lactation have received sunlight treatment with most satisfactory results. In the winter months the treatment will be more difficult, and it is then that artificial sunlight and ultra-violet rays from a carbon arc lamp may give the same excellent results as are obtained at clinics abroad.

PROPAGANDA.

New Zealand and South Seas Exhibition: Lectures and Addresses.—In the Health Department Court at the New Zealand and South Seas Exhibition the ante-natal-clinic exhibit was a means by which the public were notified of the establishment by the Department of free ante-natal clinics in the four centres of New Zealand. The ante-natal clinic exhibit was visited by numerous doctors and nurses from different parts of New Zealand, who expressed their appreciation of the Department's work, and examined with interest the sterilized maternity outfit (designed by the Department), the model diet displayed for a healthy expectant mother, the maternity binder, special wearing-apparel and shoes. Many of the visiting medical practitioners and midwives requested that the Department should supply them with the ante-natal-clinic charts and literature for distribution amongst their patients.

Opportunity was accorded for the instruction of town and country mothers who sought information and advice from the ante-natal-clinic nurse, and every effort was made to impress the public with the importance of parental hygiene, ante-natal care, and the principle of voluntary notification of pregnancy.

Ante-natal-clinic Literature.—Pamphlets entitled "Dental Hygiene," "Special Exercises," "Prevention of Constipation," "Suggestions to Expectant Mothers," "Diet for an Expectant Mother," and "A Cookery-book for Mothers" were compiled during the year for distribution at the clinics. Posters were designed to show the importance of general hygiene, exercises, correct diet, and the prevention of puerperal sepsis, goitre, and dental caries. Several letters commenting favourably upon the ante-natal-clinic literature and charts have been received from abroad, and during the year the clinics have been visited by members of the medical and nursing profession.

Addresses and Lectures.—Sixteen addresses were given in the four centres during the year to the British Medical Association and societies interested in the subject. In all cases the societies expressed their approval of the work being done, and desired to assist the Department in the establishment of the clinics.

Lectures: So that there would be definite co-operation between the midwife and the ante-natal clinic, and in order that the midwife might be informed of the clinical methods adopted by the Department of Health, a course of twelve lectures was given on the work each term. During the last year forty-two lectures were delivered on ante-natal work to nurses in Wellington, Auckland, and Christchurch Districts.