

REPORT

To the Honorable the Minister of Health.

SIR,

We have the honour to submit to you a Report on the Welfare of Women and Children in New Zealand and Victoria, with particular reference to the lowering of the Infantile Mortality Rate of Victoria.

For the purposes of this Report we have spent three months in New Zealand and two and a half months in Victoria. During this time we have visited the principal towns and various country districts in New Zealand and Melbourne and representative country towns in Victoria. We have made an exhaustive inquiry into different child welfare organizations, and in addition have visited general and maternity hospitals, crèches, and day nurseries. We have interviewed many different people, including Public Health officials, doctors, matrons, and sisters.

We should like to express our thanks for the courtesy and consideration with which we have been treated both in New Zealand and Victoria in the course of our investigations.

The subject of this Report is so very extensive, and deals with so many different factors, that we have tried to confine ourselves to those which have a practical bearing on the lowering of the infantile mortality rate in Victoria.

The following quotation from the Medical Research Committee points to the desirability of considering the whole subject of infant welfare in its proper perspective with regard to public health and public welfare generally:—

“To think of infant mortality as an entity and to attack it as a single problem appears to the Committee to be against the interests of efficiency, whether in administrative action or in the planning of new research work. It is only our relative ignorance of the causes of deaths in infants and children that makes the common phrase ‘infant mortality’ less obviously confusing or meaningless than a reference to ‘adult mortality’ as a single object of executive action or scientific inquiry.”—(From the report of M. H. Watt, H.I., D.P.H., Director Division of Public Hygiene in New Zealand.)

We propose to give a short summary of general conditions in the Dominion and in the State, and a more detailed description of maternal and child welfare activities, particularly from the point of view of preventive medicine. With this object we propose to deal with the subject under the following sections:—

- (i) Summary of general conditions, including climate, population and its distribution, number of women employed in industries, water supplies, vital statistics, and graphs.
- (ii) Activities of the Health Departments.
- (iii) Milk Supplies.
- (iv) Maternal Welfare.
- (v) Child Welfare Activities.
- (vi) Special Child Welfare Organizations—
 - A. Royal New Zealand Society for the Health of Women and Children.
 - B. Victorian Society for the Health of Women and Children (Plunket System).
 - C. Victorian Baby Health Centres Association.
 - D. Summary and Conclusions.
- (vii) Recommendations.

SECTION I.—GENERAL CONDITIONS IN NEW ZEALAND AND VICTORIA.

In New Zealand.

New Zealand is particularly fortunate in that it possesses an insular equable climate with a plentiful rain supply, an absence of overcrowded industrial areas and no obvious slums.

The industrial employment of women is very small, and especially in the case of married women. The total for the last year—12,130 and the number of female workers to male workers—23 : 100.

There is a plentiful food supply, and no poverty that is not preventable. The population is well distributed, and the largest city at the last census had a population only of 180,790.

In Victoria.

The climate of Victoria is very variable, and in some places in the north the temperature in summer reaches a height of 115 degrees in the shade.

It is also subject to droughts, and a good rainfall is not general throughout the State. There are overcrowded industrial areas in and around Melbourne, and large slum areas. Women, including married women, are employed in factories to an increasing extent—the total number in 1923–24 being 48,584.

The number of female workers to male workers—45 : 100.

In New Zealand.

Population of Dominion—1,343,021 (1921).

Area—103,285 square miles.

Average Rainfall—50 inches.

The population of the four principal urban cities together=37 per cent. of total population.

The average density of all New Zealand cities =2.5 persons to the acre.

Density in Wellington=3.5 persons to the acre.

Water Supply.—There is a plentiful water supply throughout the Dominion.

In Victoria.

Population of Melbourne—782,979.

Population of State—1,537,008 (1921).

Area—87,884 square miles.

Average Rainfall—25.6 inches.

Population of Melbourne=52.5 per cent. of total population.

Density in Melbourne=5.2 persons to the acre.

In the southern parts of Victoria there is an abundant water supply, but in the central and northern areas, irrigation schemes have been found necessary, and there is often a serious lack owing to droughts, which deplete the rivers, and because of the low annual rainfall.

Vital Statistics, 1924.—General Death Rate for 1924—8.29 per 1,000 of mean population.

Infantile Mortality Rate—40.2 per 1,000 births.

Birth Rate—21.57

Rate of Natural Increase—13.28

Illegitimate Births—4.77 per 100 births.

Maternal Mortality—5.0 per 1,000.

Figures of the infantile death rates from diarrhoeal and respiratory diseases show that, roughly speaking, the infant mortality rate increases from N. to S. in respiratory diseases, and from S. to N. in diarrhoeal diseases.

	Diarrhoeal.	Respiratory.
Auckland ..	3.7	2.6
Wellington ..	3.4	4.2
Christchurch ..	2.4	3.1
Dunedin ..	1.4	3.9

These figures are for a period 1920-23, and show the rate per 1,000. These figures are quoted from the report of E. P. Neal on infant mortality.

The high figure in Wellington may be partly due to the comparatively crowded housing conditions.

	1924.	1925.
General Death rate ..	10.05	9.47
Infantile Mortality Rate	61.3	57
Birth Rate ..	22.01	21.49
Rate of Natural Increase	11.96	..
Illegitimate Births ..	4.59	4.26
Maternal Mortality ..	4.8	..

We are much indebted to Mr. Barkley, of the Central Weather Bureau, Melbourne, for most of the following facts, and for the appended Graphs II., III., IV., V., VI., VII.

Graph I. illustrates the annual figures of the infantile death rates in New Zealand and Victoria (under one year per 1,000 births), 1870-1924.

Graph II. illustrates the smooth values of the decrease in the infantile death rates in Scotland, England, Victoria, New Zealand, Belgium, Holland, with the percentage rates of improvements per annum. Scotland, 2 per cent.; England and Wales, 2.8 per cent.; Victoria, 2.25 per cent.; New Zealand, 3.0 per cent.; Belgium, 4.5 per cent.; Holland, 6 per cent.

Concerning New Zealand and Victoria, dating from 1900-1924—

“There is an improvement in the smooth values for New Zealand of a drop to 39.9 per 1,000 births, i.e., an average improvement of 3.01 per cent. per annum. Victoria fell to 57.4, i.e., an average annual improvement of 2.25 per cent., the difference in the rate between Victoria and New Zealand being .76 per cent.

There is a greater dispersion of deviation from the normal in Victoria than in New Zealand, and also a greater variation in temperature and a higher absolute value. New Zealand, having a more even insular climate with lower range of temperature, shows closer approach of annual rate to the mean value than Victoria.

New Zealand started at 84 in 1900, Victoria at 100 deaths per 1,000 births. Considering the greater rainfall, lower and more even temperature (see Graphs IV. and V.), New Zealand was starting on a very high figure.”

It will be noted that the fall of the infantile death rate should not be dated from an unusual peak as in 1907, which "provides a good illustration of the periodical fluctuations in the rate due to climatic and epidemic conditions, the infantile deaths from intestinal, respiratory, and infective groups of diseases in this year being much above the average." (Dr. Watts's report.)

Graph III.b "shows the annual curve for the infantile mortality rate in Melbourne compared with the temperature and rainfall. This graph shows that the deaths vary directly with the temperature, which accounts for 78 per cent. of variations, and inversely with the rainfall which accounts for 22 per cent. of variations."

Graphs IV. and V. show the more favorable conditions in Dunedin as compared with Melbourne in regard to the mean maximum temperatures and the rainfall.

"Based on the relation of the mean temperature of the hottest month, Melbourne's infantile death rate from diarrhoea per 1,000 births should be 5 against Dunedin's 1.4."

Graph VI. shows "that the problems in regard to New Zealand and Victoria are quite different." In Victoria epidemic diarrhoea shows a maximum predominant; in New Zealand this is absent. In New Zealand the chief problem concerns respiratory disease." (E. P. Neal, Journal American Statistical Association 1925.)

Graph VII. shows the population density and infantile mortality rate in the Melbourne metropolitan area. In this area above a basic rate of 4 per 100, which probably represents death under one month, the infant mortality is directly proportional to the density of the population, the temperature conditions being practically uniform over the area.

Departures from this strict relationship are shown by the eastern and south-eastern suburbs, which have a low rate compared with their density, associated with heavier rainfall and porous sandy soils, while the western and northern suburbs have a relatively high rate associated with a low rainfall and stiff clay soils. In this graph the densities are those of the census of 1921, and the death rate an average of the ten years 1916-1925 inclusive.

Earth temperatures.—"In a paper by the Reverend Father Algue, Director of the Philippine Meteorological Service in Manila, it is stated that dry warm soil allows bacteria to multiply. Cholera, like enteric, is more virulent when the ground temperature 4 feet below the surface reaches a temperature of 56 degrees. When the level of the subsoil water is low this occurs more readily."

Dr. John Tatham, Medical Officer of Health for Manchester, states that "when the temperature at a depth of 4 feet below the surface reaches 56 degrees, infantile diarrhoea may be expected to become epidemic in the city."

Dr. Edward Ballard, F.R.S., says "it is a well-established fact that the subsoil temperature for meteorology purposes is by far the most effective element in the causation of diarrhoeal prevalence. The decline in diarrhoeal mortality coincides with the fall of the subsoil temperature below 56 degrees at 4 feet, and is not as rapid as the fall of the atmospheric temperature, and epidemics may continue after the atmospheric temperature has fallen."

SECTION II.—PUBLIC HEALTH ACTIVITIES.

Sir Arthur Newsholme, in his American addresses on "Health and Insurance," stresses the influence of general public health measures in promoting infant welfare.

"Improvement in child welfare has occurred as the sanitary and social progress of the country has advanced."

Speaking of the steady decline of the infantile mortality rate in England, he says—"It is to be noted that much of the decline occurred during the period when the hygienic work affecting child welfare was confined to public health measures."

In New Zealand.

The head of the Health Department is the Minister of Health, whose duties are entirely confined to health matters.

Administration of the Health Act.—The chief administrative officer is the Director-General of Health.

The Department comprises the following—

1. Division of Public Hygiene,
2. Division of Hospitals,
3. Division of Nursing,
4. Division of School Hygiene,
5. Division of Dental Hygiene,
6. Division of Child Welfare,
7. Division of Maori Hygiene,

In Victoria.

The head of the Health Department is the Minister of Health, who is also in charge of another department.

The Health Acts are administered by the Department of Health, which also administers the Midwives Act, the Goods Act, the Venereal Diseases Act, Heatherton Sanatorium Act, the Masseurs Act, and the Nurses Registration Act.

Each of which is under the supervision of a divisional head called the director.

In New Zealand.

The Board of Health.—Under the chairmanship of the Minister of Health there is a Board of Health which is composed in addition to the Minister, of the following members :—

1. The director-general.
2. Three general practitioners.
3. An appointee of the New Zealand Municipal Associations.
4. An appointee of the New Zealand Counties Association.
5. A member of a recognized association of civil engineers.
6. A chairman of a hospital board.
7. A lady member.
8. A person appointed by the recommendation of the Minister.

The Board in the main is advisory, but may exercise mandatory powers in certain circumstances.

Commissions of inquiry may be appointed to assist the Board.

The Dominion is divided into health districts, each of which is under the charge of a medical officer of health, who must be a medical practitioner with special qualifications in sanitary science.

The Department of Health employs and directly controls all medical officers of health and a large number of sanitary inspectors.

An effort is being made to encourage the local authorities to assume their own responsibilities in regard to these officers.

Sanitary Inspectors.—By the provision of the Health Act every local authority must appoint sanitary inspectors who must now hold the certificate of the Royal Sanitary Institute or an equivalent certificate.

The duties of these officers include regular inspection and the furnishing of reports to the Medical Officer of Health.

In Victoria.

The Health Commission.—This is an advisory body composed of the Chief Health Officer and six members appointed by the Governor in Council.

The medical and sanitary staffs of the Commission consist of—

1. The chief health officer who is chairman.
2. Six district health officers and three assistant health officers.
3. Chief sanitary engineer, assistant sanitary engineer, three building surveyors, and four building inspectors.
4. Twelve health inspectors. The main function of the Commission is to enforce the execution of the Health Acts by the local municipalities.

The Commission can prosecute and can order health measures, but has no control over any officers, nor the handling of any money. If any schemes need extra money the Commission asks the Health Department to approach the Government.

The State is divided into six health areas, one central area within a radius of 40 miles of Melbourne, and five rural districts.

There is a district medical officer of health in each area, five at present in office and one vacancy. In addition, each municipality appoints a local general practitioner as health officer, at a small honorarium.

In country places the majority of inspectors do not deal with health matters alone, and in many cases have had no special training. There are 190 municipalities, and in 35 of these the inspectors are not qualified.

After June, 1926, a special qualification will be compulsory.

ACTIVITIES OF THE HEALTH DEPARTMENTS CONCERNING INFANTILE MORTALITY.

*Infantile Diarrhoea Mortality.**New Zealand.*

Death rate per 1,000 births of infants under two years of age, from diarrhoea and enteritis in each year from 1900–1925—

	New Zealand.	Auckland.
1900	15	59
1901	10	29
1902	17	52
1903	14	48
1904	17	24
1905	13	31
1906	10	31
1907	23	27
1908	18	37
1909	11	18
1910	15	40

Victoria.

Death rate per 1,000 births of infants under two years of age, from diarrhoea and enteritis in each year from 1900–1925.

Victoria.	Greater Melbourne.
25·60	—
25·83	—
31·68	—
29·73	—
19·05	—
20·36	—
23·96	—
21·26	—
32·25	—
22·57	—
29·58	—

New Zealand.

	New Zealand.		Auckland.
1911	11	..	24
1912	7	..	18
1913	9	..	24
1914	6	..	12
1915	5	..	10
1916	7	..	11
1917	6	..	15
1918	3	..	4
1919	3	..	3
1920	3	..	4
1921	5	..	7
1922	3	..	4
1923	3	..	3
1924	4	..	9
1925	*	..	3

* Figures not obtainable.

Victoria.

Victoria.	Greater Melbourne.
20.52	—
22.08	—
21.04	—
29.34	—
17.54	—
23.66	—
12.02	—
15.70	18.6
15.62	18.1
19.14	21.1
20.43	20.0
12.37	13.8
17.17	18.6
12.26	13.4
13.61	13.9

The decline in infant mortality which began in New Zealand about 1900 may be attributed largely to the following factors:—

I. Public Health Act of 1900 and the general improvement in the sanitary circumstances of the people of the Dominion consequent upon the Act.

II. The Midwives Act of 1904.

III. The opening of the first St. Helens Maternity Hospital in 1905.

IV. In 1907 a standard for milk was first laid down.

In this year the Royal Society for the Health of Women and Children also began its valuable work.

V. The Health Act of 1908.

The *Nurses Registration Act* 1908.

The dating of the Sale of Food and Drugs Act 1908.

In Auckland, where the diarrhoeal death rate of infants has diminished so decidedly, a marked improvement in the general sanitation dates from 1906. This, plus the educative work of the Royal New Zealand Society for the Health of Women and Children, probably accounts for the decreasing figures.

Prior to 1906 there was no sewerage, no refuse collection, and no destructor, and only open drains.

There are now no open drains, and sewerage was completed in 1920.

The water supply which was used in 1907 generally is now only used as a reserve supply, and for this purpose is chlorinated.

In 1904 sanitary by-laws were passed by the Council.

In 1912 various by-laws in regard to foodstuffs were passed by the Council, butchers' shops had to be fly-proof, and milk vendors were reduced in number and licensed.

The roads have been paved and concreted, reducing the amount of dust.

The fly nuisance improved with the improved drainage and proper refuse collection, the reduction in number of horses, and the fact that tables have been gradually removed outside the city area.

The infant mortality rate in Victoria has also declined rapidly since 1900, probably due to similar public health measures, particularly in Melbourne.

Much has yet to be accomplished from the point of view of health matters generally in country districts.

New Zealand.

Flies.—In New Zealand we were much struck by the noticeable scarcity of flies, even in the hottest summer weather.

The absence of any reliable figures regarding bacillary dysentery in infants is significant.

Victoria.

In Victoria, both in Melbourne, and particularly in country districts, the flies were prevalent everywhere, and especially in the hot weather.

In several dairies visited in the country, flies were crawling over milk utensils, on the surface of milk, and on food generally.

Wilbert C. Davison, in an article on "Bacillary Dysentery in Babies," in the Johns Hopkins Bulletin, makes the following statements:—

"That flies are a means of carrying dysentery infection has been shown by the study of Graham Smith and others, who isolated bacilli from flies both in normal surroundings and in surroundings associated with epidemic diarrhoea."

"The epidemiology of the outbreaks of dysentery in Salonica during the war has proved without a doubt that flies were offending agents during summer months."

A curve showing data of onset of cases under Dr. Davison demonstrated that the majority of cases occurred during the height of the fly season.

In a report on infantile mortality by a specially appointed committee in Victoria in 1917, it is stated that in the case of flies, it was shown in England that the Morgan group of bacillary dysentery occurs frequently in flies from diarrhoea-infected houses and rarely in flies from houses not so infected.

The dysentery bacillus was isolated from the intestinal track of flies in a desert in Egypt, and these flies were caught 2 miles away from any human habitation.

In our visits to different typical country districts of Victoria we were much struck with the inadequate sanitary arrangements, the almost universal lack of sewerage and the prevalence of open drains.

It appears to us a pity that young communities such as new settlements should not install sewerage before disease occurs. Adjacent to one new settlement, which has the second highest birth rate in the world, there is still a most insanitary camp which must be a breeding place for flies and a potential source of disease.

The report already referred to on infantile mortality (1917) states that "so much of the infantile mortality in Australia occurs in the country districts that the clear association between defective sanitary methods and a high mortality, must serve as a standing reproach to the authorities concerned. The issue is clear enough for the public authorities to face. Institute a proper system of removal of human excreta, of removal of refuse, and of paving and draining environs of dwelling-houses, and the infantile mortality rate will fall."

The above factors are only some of those operating in regard to infantile diarrhoea, and do not entirely account for the marked decrease in the infantile death rate in New Zealand. This is largely due to the activities of the Health Department, but the educative work of the Royal New Zealand Society has played a marked part by means of the encouragement of breast feeding, the regulation of diet, and the proper care of cow's milk in the home.

Finally, we entirely agree, in regard to Victoria, with the following statement made by the Royal Commission on Health:—

"We are satisfied that a greater number of experts highly trained in public health is needed in Australia. It is essential that these should be provided and given such status and salary as would attract medical practitioners of exceptional ability and efficiency. Facilities for training these experts in Australia are very inadequate and ought to be increased."

SECTION III.—MILK SUPPLIES.

(Abridged from original Report.)

As the general milk question does not come within the scope of this report, we propose to confine ourselves to the recommendation of certain standards for milk used in infants' food.

"It is the duty of public authorities to ensure that the supply of milk for infant feeding shall be adequate both in quantity and quality, and with this view, to organize legal supervision over the milk industry." (*Report of the Geneva Conference.*)

The great importance of breast milk for infants should be widely advertised. Fresh cow's milk, suitably modified, is acknowledged to be the best substitute, but can never equal the natural food.

To ensure a safe supply of milk for infants who are artificially fed we would suggest that—

- (1) Raw fresh cow's milk be supplied from tuberculin tested cows milked by dairymen who are medically examined to eliminate diphtheria and typhoid carriers. The milk should be cooled immediately after milking and bottled and sealed at once and packed in ice until delivery. Great emphasis should be laid on the care of the milk in the home in keeping it cool and clean and free from flies and dust.

Bacteriological examinations should be carried out with the aim of reaching a standard equal to the Grade A milk of New York, i.e., a milk containing less than 10,000 bacteria per cubic centimetre. This standard is already reached by the Talbot Milk Company, Melbourne.

- (2) Even with the above precautions we would suggest the advisability of boiling all such milk in the houses, particularly in the hot weather such as is experienced in this State during the summer. We suggest boiling in preference to pasteurising, owing to the greater simplicity of the former and the ease with which it can be carried out in the home, although home pasteurisation is adequate when carefully carried out in cooler climates. As the anti-scorbutic vitamin is necessarily destroyed, orange juice or other fresh element must be added to the diet.

In the Bulletin of the Johns Hopkins Hospital, W. C. Davison writes—"That an infection of the milk in the individual household by flies or by the mother's fingers is a possible explanation of the spread of bacillary dysentery, and that the boiling of milk and milk mixtures before feeding has a most important influence on prevention of diarrhoea and diarrhoeal diseases."

King and Powers (Baltimore), have found "that the use of boiled milk in boiled containers has greatly reduced the incidence of dysentery among children."

Janet Lane-Clayton, who was appointed by the Local Government Board of London to investigate the value of boiled milk as a food for infants, after an exhaustive inquiry summed up in these words—"Such small differences as have been found in the nutritive values of raw and of boiled milk have been in favour of boiled milk."

In Abt's Pediatrics, Brenneman says—"Boiling destroys practically all pathogenic organisms, and up to the present time is the only reliable measure that does so."

It is interesting to note that, in the Burnley Baby Health Centre, where the majority of infants among those who are not breast fed are on a bottled pasteurised milk, there has not been a single death from diarrhoea for the last three years.

In Caulfield, where the babies were on a fresh bottled milk, which was boiled in the home, there was not a single case of diarrhoea among babies attending the centre during the whole of last summer.

The above cases instance the great importance either of boiling or pasteurising milk, even of a certified high grade, which is used for the feeding of infants.

SECTION IV.—MATERNAL WELFARE.

The question of maternal welfare is vitally bound up with that of infant welfare. The infantile mortality for more than 50 per cent. of all deaths under one year occurs in the first month, and of that number 70 per cent. occurs under one week.

Ante-natal care influences a successful parturition and the birth of a healthy child. It also affects the post-natal health of the mother and her subsequent ability to feed her child on the breast.

I.—New Zealand.

In 1924 the Health Department entered upon an intensive campaign for the promotion of maternal welfare, owing to the comparatively high maternal mortality rate obtaining in the Dominion, and also with the idea of lowering the comparatively high percentage of infantile deaths under one month. For this purpose the following officers were appointed:—

- (1) A consulting obstetrician to the Department whose duties include the revision of the methods of training midwives, and the suggesting of improvements in the actual practice of midwifery.
- (2) An inspector of private hospitals who was formerly a general practitioner.
- (3) An ante-natal medical officer.
- (4) Nurse inspectors of private hospitals.

In addition the following measures have been undertaken :—

- (1) The regulations regarding private hospitals and midwives have been reviewed and revised.
- (2) A Nurses' and Midwives' Registration Bill has been passed.
- (3) Ante-natal clinics have been established.
- (4) The Department has issued to all private maternity hospitals pamphlets dealing with new regulations and with rules for the management of labour and the puerperium.

A new register must be kept in all maternity hospitals with detailed charts with the usual particulars, and a monthly return sent in to the Health Department.

- (5) Maternity Wards.—At the present time, out of 47 hospital boards, 24 have maternity hospitals or wards in conjunction with their main hospitals.

In all there are 38 wards or hospitals under the control of hospital boards, with a total of 232 beds.

In addition there are seven State (St. Helens) maternity hospitals, with a capacity of 124 beds, while five additional institutions are in course of erection by hospital boards.

Since the first of these hospitals was instituted in 1905, the attendances show an increase in number each year. The figures for 1925 show a total of 2,015 births in the institutions, 25 deaths of infants, 5 deaths of mothers, and 702 confinements attended in the district.

The Midwives Act of 1904 provided that after a certain date, only those midwives who were duly registered would be qualified to practice.

The Nurses and Midwives' Registration Bill of 1924 provides a registration board to consist of—

- (1) The Director-General of Health.
- (2) The Director of the division of nursing.
- (3) A registered general practitioner.
- (4) Two other persons, one of whom shall be a registered nurse and the other a registered midwife.

Every Medical Officer of Health shall be charged with the supervision of all midwives and maternity nurses within his district, and shall have power to investigate any charges of malpractice, negligence, or misconduct on the part of these nurses.

The private hospitals regulations include the following :—

- (1) In every private maternity hospital there shall be employed a registered midwife to every four patients.
- (2) Stringent rules in regard to notifiable diseases and disinfection in accordance with instructions issued by the Medical Officer of Health of the district.
- (3) Except in cases of emergency, no patient must be admitted for treatment subsequent to an abortion or miscarriage, and no patient must be admitted for curettage.
- (4) The Medical Officer of Health must be notified if any patient has a temperature of 100 degrees or over on any three days of the puerperium.
- (5) When any case of puerperal fever exists, all medical practitioners attending, or engaged to attend any patient in the course of the next two weeks, must be notified immediately.
- (6) When anyone applies for a licence to keep a private maternity hospital, a form with a detailed description of all premises must be sent to the Minister in Charge of Hospitals.
- (7) Detailed instruction in regard to disinfection after any case of puerperal fever.

Training of Midwives and Maternity Nurses.—By the new regulations midwives, i.e., registered general hospital trained nurses, will undergo a training for eight months, of which the first four months is devoted entirely to ante and post-natal work, and four months to actual labour work.

Maternity Nurses, i.e., women who do not possess a general hospital training, will have a training as follows :—

- (1) Twelve months ante and post-natal work only. At the expiration of this time she may sit for an examination and obtain a maternity certificate.
- (2) Twelve months outside work, during which time she must work under qualified medical practitioners only.
- (3) Four months labour work in a hospital, after which she may sit for her midwifery examination.

The trainee is required to do a minimum of twenty cases in the labour wards.

It is suggested that the smaller maternity hospitals should be used for the training of the maternity nurses, while the larger maternity hospitals should be devoted to the training of midwives and to the final four months course of the maternity nurse, before she takes her examination to qualify as a midwife.

Training of Medical Students.—Up to the present time the student has only been required to attend twelve labours. As the students visit cases in pairs this implies only the actual management of six labours each.

Before undertaking the practical work, each student is required to attend a course of lectures on midwifery, and to pass a theoretical class examination on the subject.

Students are appointed to be on duty in the maternity hospital in the order determined by the class examination, and they work in rotation in order that each may have his turn during the year. In this way only four cases are given to each pair of students, in addition to attendance at the ante-natal department, after which the next couple come on duty.

The remainder of his cases may be completed in other hospitals or under the supervision of medical practitioners. In future, the student will be required to attend 20 labours.

Ante-natal Clinics.—These are six clinics in all in Wellington and five in Christchurch, and the department is considering the organization of further clinics in Auckland and Dunedin in the near future. The value of these clinics is shown by the fact that in the first 3 months 1,081 visits were paid by expectant mothers.

There are four main clinics, staffed by medical officers in the St. Helens Hospitals, and cases may be referred to these clinics by subsidiary centres which are conducted by nurses specially trained.

The Training of the Nurse in ante-natal work consists of twelve lectures from a medical officer and practical training from a nurse instructor. At each clinic it is possible to train three nurses at a time each having special duties in rotation. Only one trainee is present at a time with the nurse instructor. Each nurse gains experience in examination, diagnosis and instruction in the general hygiene of pregnancy.

The Plunket nurses in the country are now relieved for three months to do this training, and the extra salary for a relieving nurse is paid by the Health Department.

A nurse instructor is three months at a clinic and trains an average of thirty nurses during this time. She then moves on to another centre and trains nurses from that district.

In the ante-natal clinics attached to the Plunket rooms, the nurses are intended to work under the patient's doctor, and if the special ante-natal officer visits such clinics, she acts somewhat in the capacity of a house surgeon to the private doctor. In other clinics where the ante-natal officer attends for a period of three months at a time, she does actual manipulative treatment if necessary.

Routine of an ante-natal clinic.—The patient comes every month by appointment. During the last two months of her pregnancy she comes every fortnight. Routine examinations are made and external examinations only by the nurses.

The nurse instructor in charge of each clinic sends a monthly report to the medical officer of the district.

Each patient is urged to visit her private doctor. A complete record with history, measurements, &c., is kept, with separate columns for notes both by the nurse and the private doctor. The latter is informed that his patient is attending the clinic by a printed note.

Dental clinics are run in connexion with the ante-natal clinics by the various hospital boards, and any patient who requires treatment and who is unable to afford a private dentist, is given a printed card that enables her to attend the dental clinics.

Any doubtful case is sent to have a Wassermann test and special cases may be sent for X-ray pelvimetry, &c.

In addition to verbal advice, booklets are issued by the Health Department and distributed at the Clinics.

Arrangements have been made for a standard maternity outfit which can be sterilized at the ante-natal clinics at a very cheap price.

Conclusion.

The Department of Health is to be congratulated on the excellent provision made for ante-natal clinics, and also for dental clinics for expectant mothers.

The value of this work should be very great. In addition to the saving of time for busy practitioners, many women who might otherwise receive no ante-natal care, are encouraged to attend, by the fact that in the clinics they will be examined by women only.

The very detailed instructions issued in regard to the management and aseptic technique of labour and the puerperium appear to us to lay too great an onus of responsibility on the midwife and too little on the medical practitioner.

The practical training of the medical student appears to us to be inadequate and too intermittent, owing to the fact that he does not complete his cases consecutively. There appears to be a difficulty in getting a sufficient number of cases, but as the St. Helens Hospitals have been open to students since the war and they may also attend cases in various refuge homes, this difficulty should not be insurmountable. It is regrettable that the larger maternity hospitals at least, should not have house surgeons, in order further to educate the student. In his report the consulting obstetrician to the department recommends the consolidation of all public maternity hospitals in each of the four cities into a single institution with a resident medical officer, with provision of a sufficient number of beds to provide material for the instruction of nurses and medical students.

In some cases the keeping of the new charts leads to much duplication. In the Batchelor hospital in Dunedin, for instance, where both midwives and students are trained, it is now necessary for four similar detailed charts of each patient to be filled in and supplied to—

- (1) The Charitable Aids Board.
- (2) The Dunedin Hospital.
- (3) The Department of Health.
- (4) The Ante-natal Officer.

The fact that on the charts of the St Helens Hospital provision is made to show the progress of the baby, including a weight chart, is an indication that the importance of the baby after birth is realized, but a space devoted to "artificial feedings" suggests that the substitution of artificial foods for breast milk is accepted as a matter of too common occurrence.

SECTION IV.

In Victoria the comparatively high maternal death rate has led to the appointment for two years of a director of obstetrical research by a medical research committee in order to investigate the causes thoroughly, and to suggest a scheme for improvement.

Because of the present transition stage we do not propose to give more than an outline in this report.

The director has sent a letter to each member of the Victorian Branch of the British Medical Association, describing his programme and asking for co-operation and assistance. He is attacking the question from the following points of view:—

- (1) Clinical Research.
- (2) Inspection of Hospitals.
- (3) General Practice.

The *Midwives Act* 1915 contains powers almost identical with those in the *Midwives Act* of England and Wales, but makes provision for the appointment of a *Midwives Board* to consist of five departmental officers only.

Registration was permitted under the Act up to the end of 1916, provided that the applicant produced a certificate of training for twelve months at the Women's Hospital or at a corresponding hospital in another State, or in the case of a general hospital trained nurse, a certificate showing a six months training in midwifery.

After the end of 1916 it was made compulsory that all applicants must pass an examination prescribed by the Board.

A concessional clause in the Act provided that up to the end of 1917 all applicants who could produce evidence that they had been in practice for two years prior to the Act, could be registered. For the sake of distinction these latter are called "practised midwives" in contradistinction to the "trained midwives."

At present there are practising 1,327 practised midwives and $\begin{matrix} 1327 \\ 1,323 \\ \hline 2650 \end{matrix}$ trained midwives. 1,070 midwives have passed the State examination.

Training of Midwives.—The course is still six months and 12 months for trained hospital nurses and untrained women respectively.

The Women's Hospital is the central training school, where all nurses in training schools around Melbourne must come for lectures, with the exception of those at the Queen Victoria Hospital, who attend lectures in their own hospital.

In the regulations it is laid down that trainees are required to conduct twenty cases of labour under supervision. No untrained unregistered woman is allowed to attend any confinement case even after the labour.

Training of Medical Students.—The Women's Hospital, Melbourne, is the only training school in midwifery for medical students. The course includes—

- (i) Sixty lectures at the University with four demonstrations in obstetrics and gynaecology.
- (ii) Nearly six weeks' residence at the Women's Hospital, one month of which is spent in the labour wards, post-natal wards and four mornings each week in the ante-natal department. Ten days are spent doing externe work with attendance at the clinics while waiting for district calls.
- (iii) The personal conduction of twenty labours under supervision.
- (iv) Lectures and demonstrations by the honorary staff. The medical superintendent has been appointed a clinical tutor and gives ten special lectures and demonstrations. The students also receive instruction from the resident medical officers. In addition extra tuition is given on any cases of puerperal septicaemia in special wards.

Unfortunately there is often great difficulty in obtaining the required number of actual labour cases (20). *If the work of the externe departmen were increased this difficulty would be obviated.*

The maternity training hospitals in the State of Victoria are 33 in number, and of these 26 are in the Melbourne area.

Maternity Allowance Act.—In 1912, an Act was passed by the Federal Government providing for the payment of £5 to the mother of every child born in the Commonwealth.

The number of claims in Victoria up to June, 1924, amounted to 406,418 and the total sum paid was £2,030,740.

Figures furnished to the Royal Commission of Health by the Commissioner of Maternity Allowances as to the percentage of cases attended in public or private hospitals for the year ending June 1924, amounted to 60 per cent.

Ante-natal work.—There is not, as in New Zealand, a special branch of the Health Department dealing with this work. In Melbourne there are ante-natal clinics in connexion with—

- (i) The Women's Hospital.
- (ii) The Queen Victoria Hospital.
- (iii) The Alfred Hospital.

Ante-natal care is also given in some refuges such as the Salvation Army Maternity Home and also at the Foundling Hospital.

The following figures from the Women's Hospital show the increasing numbers of patients who take advantage of this treatment.

The Clinic opened in 1920.

Year.	New Cases.	Total Attendances.
1920	299	573
1921	666	1,078
1922	988	1,977
1923	1,341	2,726
1924	1,516	3,305
1925	1,849	..

The number of ante-natal clinics has been increased from one morning to four mornings each week, but in spite of this fact, on one morning there may be as many as 78 patients.

Only 50-60 per cent. of the patients attending the ante-natal clinics are confined in the hospital.

The following figures relating to deaths from eclampsia in the hospital for the year 1924-25 are some indication of the value of ante-natal care.

Cases admitted who had had ante-natal treatment = 9 = 21 per cent.

Cases admitted who had had no ante-natal treatment = 33 = 79 per cent. Of the above nine cases which had had ante-natal care, one was a case of twins (which increases the liability to eclampsia), and two cases had only attended the ante-natal department for short periods.

During the same year, twenty cases suffering from a buminuria were admitted from the Ante-natal Department and were treated with complete success.

The Queen Victoria Hospital. Every woman who is to be confined in this hospital must attend the Ante-natal Department. The only exceptions to this rule are a few emergency cases.

Statistics from this hospital show that in the first three years after the ante-natal department was inaugurated in 1921, 1,031 cases were confined with two maternal deaths.

In 1924, there were 429 labours and no maternal deaths.

Further there were no cases of eclampsia, and, owing to early detection of venereal disease and its treatment, no grossly syphilitic infant was born.

The growth of the ante-natal department is shown in the following table :—

Year ending—	Individual Cases.	Attendances.
July 1922	221 ..	516
1923	513 ..	1,791
1924	1,063 ..	4,009
1925	1,186 ..	4,303

Ante-natal Care in the Baby Health Centres.—Expectant mothers attending these centres are given advice in general hygienic matters, and in addition are urged by the nurses to obtain a thorough examination from their private doctor, or where the expense of a doctor cannot be borne, to seek advice at one of the established antenatal clinics.

The ante-natal advice given in regard to preparation for breast feeding is a most valuable part of the educative work of these centres.

Ante-natal work in the country is as far as is possible carried out by the private practitioner on his own cases. The results appear to be excellent, and the standard of work of the practitioner very high, judging by the frequency with which we were told that practically no maternal deaths had occurred in years.

Bush Nurses generally have charge of maternity cases in far back country areas. There are now 49 centres in all, and the work of the nurses largely consists of maternity work.

Melbourne District Nurses' Association.—In addition to supplying nurses for district work, including maternity cases, this association has just erected an after-care-home in which there is a large ward which will be used for post-natal mothers together with their babies.

SECTION IV.—CONCLUSIONS AND RECOMMENDATIONS.

For the purposes of this Report, and in view of the fact that a Director of Obstetrical Research has been appointed, we shall confine ourselves to the question of ante-natal care.

The appreciation of the ante-natal clinics already established is shown by the very rapid increase in numbers of patients attending these clinics.

We consider that the importance of these clinics cannot be overestimated in connexion with both the mother and the child.

One of the recommendations of the Royal Commission of Health is as follows :—

“The Maternity Allowance Act should be amended to provide that the application for the allowance shall be made at least five months before the date of the expected child-birth, and that the allowance be not paid unless a medical certificate be produced to the effect that the mother has had prenatal supervision.”

With the above recommendation we are in entire agreement.

We have been given to understand that the Charities Board of Victoria is urging legislation for the establishment of intermediate midwifery wards in connexion with country hospitals. We would recommend that if this establishment is authorized, the inclusion of an ante-natal department should be conditional.

It is regrettable that in Victoria only an average of 70 per cent. babies at the highest and more usually 60 per cent. or even in some places 50 per cent. are fed entirely on the breast until nine months of age. The lower percentages are often found in the more residential areas.

That the knowledge of the management of breast-feeding is not of a high standard in most maternity hospitals is greatly to be deprecated. While every care is given to the mother the vital importance of natural feeding for the child often appears to be overlooked.

In one baby health centre, where correct advice and instructions had been given to the expectant mothers, who should therefore have had no difficulty in feeding their infants, out of thirty-five (35) cases, ten (10) came out of hospital with their infants on artificial foods.

Re-establishment of breast milk has been frequently done in the centres in cases where the child was taken off the breast on the third or fourth day while the mother was in hospital.

To remedy this defect we would suggest—

- (1) That all matrons of maternity hospitals and all midwives should have training in the essentials of breast-feeding and infant dietetics generally.
- (2) That sufficient staff should be maintained in all maternity hospitals in order to obtain the proper establishment of breast milk, and, if necessary, a special baby nurse previously trained in mothercraft.

- (3) That a complete record of the progress of the baby be kept on a separate chart.
 (4) That there should be further establishment of mothercraft homes for care of the mothers and babies.

We would emphasize the need for further treatment of venereal disease in the expectant mother.

In the ante-natal department of the Women's Hospital, of 52 cases on whom a Wasserman test was made, one in ten gave positive results. Intensive treatment was instituted on these cases. There were no abortions and in every case a healthy mature child was born.

In a control series of 25 cases there were several still-births and other infants showed signs of congenital syphilis.

In view of these remarkable results and those quoted concerning effective treatment of venereal disease in the ante-natal department of the Queen Victoria Hospital, it would seem that appointments of Serologists to ante-natal departments should be made to aid this work.

We consider also that Dental Clinics should be made available for expectant mothers who are unable to pay for the services of a private dentist. This has already been done in New Zealand with excellent results.

The difficulties that poor mothers experience in regard to leaving their homes and being confined in hospital would be greatly lessened if there were more Rest Homes where children could be looked after during the mother's absence.

An organization providing "Home Helps" would also be of great benefit in this connexion.

SECTION V.—CHILD WELFARE ACTIVITIES.

1.—In New Zealand.

1. Under the Education Department—

- (a) Infant Life Protection Agency.
 (b) Wards of State.

2. Under the Health Department—

- (a) Royal N.Z. Society for the Health of Women and Children.
 (b) Charitable Aid Board, which maintains two orphanages.

3. Private Welfare Agencies—

- (a) Society for the Protection of Women and Children.
 (b) Orphanages, mostly denominational.

In connexion with the Child Welfare Board of the Education Department, there is a superintendent who is responsible to the Minister of Education, with a varying number of officers under him in different centres. A full quota in Wellington is as follows:—

- (1) The manager of the receiving home.
- (2) The assistant manager.
- (3) A visiting officer.
- (4) The matron of the receiving home.
- (5) A district agent.
- (6) A visiting nurse.
- (7) A probation officer (for boys over a certain age).

All the officers, with the exception of the superintendent and the probation officers, are women, specially selected, from the ranks of teachers and trained nurses.

Preference is given to a nurse with a Plunket training, but because of the difficulty of obtaining a sufficient number this is not compulsory.

The Infant Life Protection is an authorized agency under the Infants Act, which calls for State supervision of all infants under six years, maintained apart from their mothers and adopted with a premium. Every private home in which such infants are boarded must be registered and subject to regular supervision, and before any private institution can take in such infants it must be inspected and approved by the district agent before it can be granted exemption from this registration.

At the end of 1924 there were 704 children in 584 licensed homes.

The majority of these children are illegitimate or children of parents who are separated.

The children are boarded out in suburban areas or in country districts as near as possible to the smaller centres of the population.

Footscray.—This centre was formed soon after that of Coburg, and is situated centrally in a large room over a shop in one of the main streets.

In addition to the routine work done, similar to that of centres in New Zealand, the sister-in-charge has cleverly shown to mothers that the cost of feeding an infant on a mixture of modified milk with New Zealand emulsion and sugar of milk is actually less than that of dried milks made in accordance with directions on the tins, and no more expensive than fresh milk as generally used.

She has worked out the cost of a week's supply of the "humanized milk" as follows, in the case of a mixture which requires a pint of milk daily :—

$\frac{1}{2}$ lb. of emulsion at 2s. 6d. . . . .	..	..	..	..	s. d.
$\frac{1}{2}$ lb. sugar of milk at 2s. 6d. . . . .	..	..	..	..	1 3
Milk for seven days at 3 $\frac{1}{2}$ d. a pint	1 3
Lime water (sufficient for three weeks)	2 0
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Yarraville.—In 1923 the council formed a new centre owing to the increase in numbers in the Footscray centre.

Williamstown.—A new centre was opened in July, 1921.

Newport is now a sub-centre, where the Plunket nurse from Williamstown can be interviewed two afternoons a week.

Swan Hill.—A country centre was formed in Swan Hill in November, 1925. The council gave the use of two rooms for this purpose, and also the usual grant for the nurse's salary.

The committee of this centre is very enthusiastic and anxious to extend the work. Already a request from one of the near-by townships has been received for the services of the nurse at regular intervals, but owing to lack of transport it has not yet been possible for the nurse to undertake the extra work.

General Summary.

"The Society for the Health of Women and Children of Victoria" was instituted in 1920. While the Society was modelled on the "Royal N.Z. Society for the Health of Women and Children," owing to the difficulty of transplanting, *in toto*, a system from one country to another, the organization and spread of the movement in Victoria is not comparable with that of New Zealand.

We consider that the marked personal influence and organizing powers of the founder of the Society is one of the main features in the success obtained in New Zealand.

The propaganda work of the Victorian Society is not adequate, as shown by the fewness in number of the district centres. Of these centres, six are in or near the metropolis, and only one in the country.

We consider that lack of medical supervision in the centres, as in New Zealand, is a serious defect.

In New Zealand this is to some extent counterbalanced by a visiting Director of Plunket Nursing, who organizes and co-ordinates the work generally.

We have found no evidence of the practical teaching of ante-natal work included in the training of the nurses, although theoretical lectures are given dealing with the expectant mother. It is doubtless owing to this fact that the figures in ante-natal attendances in the district centres are rather low.

We consider that the lack of a sufficient number of teaching sisters makes the work of the matron unduly exacting.

The Society is to be congratulated on the possession of a residential training school built expressly for the purpose, also for the energy and enthusiasm of the President and the unremitting labours of the Committee and of the matron and other members of the nursing staff.

C.—VICTORIAN BABY HEALTH CENTRES ASSOCIATION.

Foundation.

The Victorian Baby Health Centres Association was formally instituted in June, 1918, to amalgamate previously existing Baby Clinics in Melbourne and Geelong. These clinics were originated in 1917 by three voluntary workers—Dr. Younger, Mrs. Hemphill, and Mrs. Ramsay—who later co-operated with representatives from the Committees of the Boroondara Kindergarten, the Carlton and the City Kindergartens.

Aims and Objects of the Association.

- (1) To safeguard the health of mothers and babies by the spread of knowledge of the laws of health.
- (2) To encourage the breast feeding of infants.
- (3) To employ trained nurses who shall—
 - (a) attend certain centres where not only mothers with their babies may attend, but also expectant mothers ;
 - (b) visit mothers at their homes, and help them carry out simple hygienic rules.
- (4) To hold meetings and give organized teaching to women, as opportunity shall arise, and to disseminate such knowledge by every available agency.
- (5) To co-operate with all present or future organizations working for the same objects.

The objects of the Association being to keep infants healthy, sick children are not treated in the centres, but are always referred to their own doctors or to a hospital.

Constitution.

In June, 1918, a Central Executive was formed with members from the following :—

1. Women's Hospital.
2. Children's Hospital.
3. British Medical Association.
4. Victorian Medical Women's Association.
5. Australian Health Society.
6. Talbot Milk Institute.

As at present constituted, there is a council composed of—

- (a) Two members to be appointed annually by the Victorian Government.
- (b) Two members to be appointed annually by the Victorian branch of the British Medical Association.
- (c) Two members to be appointed annually by the Victorian Medical Women's Association.
- (d) Two members to be appointed annually to represent each of the Baby Health Centres in Victoria.
- (e) One member to be appointed by each Municipal Council contributing to the maintenance of a Baby Health Centre.
- (f) One member to be appointed annually from each of the following societies :—

1. The Children's Hospital.
2. The Alfred Hospital.
3. The Women's Hospital.
4. The Queen Victoria Hospital.
5. The Foundling Hospital.
6. Association of Crèches.
7. Free Kindergarten Union.
8. District Nurses' Society.
9. The Australian Health Society.
10. Neglected Children's Department.
11. Education Department.
12. Bush Nursing Society.

There is a meeting of the Council every month, and a special meeting may be convened at any time by the President.

Officers of the Society.—These consist of—

1. Two patrons.
2. President.
3. Four vice-presidents.
4. Honorary treasurer.
5. Honorary secretary.

These hold office for one year, and are appointed by the Council.

Executive Committee.—This consists of—

1. A president.
2. Vice-presidents.
3. Honorary treasurer.
4. Honorary secretary.
5. Eight members of the Council.

Annual Meeting.—An annual meeting is held of the members of the Committees of the various Baby Health Centres and the members of the Council and Executive of the Association.

Main Functions of the Council.—

1. To establish a central executive body for the direction and assistance of Baby Health Centres.
2. To assist in the establishment of Baby Health Centres throughout Victoria, and to render them financial support.
3. To secure the interest and financial support of Government Municipal Authorities and of the general public.
4. To equip and maintain model baby health centres for the special training of nurses and for providing demonstrations for mothers.
5. To train and recommend specially trained nurses for Baby Health centre work.
6. To co-operate with School and other Authorities to give practical teaching in elementary mothercraft to school girls and young women.
7. To promote the establishment of ante-natal clinics and organized teaching for the expectant mothers.
8. To arrange for the scientific analysis of milk and for the provision of milk suitable for babies and children.
9. To promote legislative reform in all matters pertaining to the health of women and children.
10. To co-operate with other organizations.

To facilitate the Management of the Association.—

1. A medical committee from the Council is formed to supervise all medical matters.
2. A training school committee to be responsible for the running of the model training centre.
3. A finance committee.

Formation of District Health Centres.

These centres may be formed as follows :—

1. Some interested person or persons may approach the Baby Welfare Association to ask that a representative from the Association may be sent to the district to address a public meeting of women.

After explaining the movement, the representative usually suggests that a deputation or provisional committee be formed, and that the Municipal Council should be approached.

The provisional committee asks the Secretary of the Association if the representative may accompany a deputation to the Council. The Association then writes to the Council and asks if it will receive this deputation on a given date.

If a favorable reply is received, the representative explains to the Council the aims of the health centre work and the necessary financial obligation which would be incurred by the Council. If the Council passes the required grant, a form with the following details is filled in and sent to the Health Department of the Government by the Council :—

“ Application of the Council of the Municipality of _____ for a subsidy of _____ towards the cost of maintaining an infant welfare centre proposed to be established at—

1. Boundaries of district X to be served.
2. Population of district proposed to be served.
3. Number of births per annum for last three years.
4. Infant mortality rate for last three years.
5. Days and hours when centre is to be opened.
6. Name and qualification of nurses proposed to be appointed.
7. Is it proposed that any medical practitioner should attend at the centre? If so, what will be his duties?
8. Is it proposed to treat sick infants or give medical advice in respect thereto?
9. Is the district proposed to be served already served by an existing centre?
10. Is ante-natal advice included in the work of the centre?
11. What is the estimated cost of maintenance, and how is the centre to be financed and managed?
12. General observations.”

A public meeting of women is then called by the provisional committee, and members of all representative local bodies, such as churches, religious bodies, Red Cross Society, &c., and the matrons of private hospitals, and the wives of councillors, doctors, chemists, &c., are invited.

The Mayoress is automatically made the President of the new Committee which is formed from this public meeting, and a small working executive is elected. The Treasurer is usually the Town Clerk. The Committee then advertises for a nurse, who is interviewed either by them or by the Association. This nurse must have a child welfare certificate.

2. A representative of the Association may visit a district and address a meeting of representative women, to stimulate their interest in the movement. The proceedings then take the course already described.
3. As the Government will only subsidize municipal grants, the Council may be approached directly and money granted without the formation of a local committee, and the centre may be run by the nurse and Council only, as in Prahran, St. Kilda, and South Melbourne.

Finance of the Association.

The Council of the Association has no financial dealings with the Government at present. All Government subsidies for the centres go directly to each municipality. The model training centre is not subsidized.

The finance of the Association is maintained by—

1. A newspaper dépôt which brings in an average net income of £500 per annum. A paid secretary and paid workers are employed.
2. Grants and bequests.
3. Small donations, one of the largest of these being a sum of £163 from the Australian Women's National League in 1920.
4. Pattern money.
5. Training fees of bush nurses, for which a sum of £325 was given last year from the Edward Wilson trustees as a special grant.

Expenses of the Council—

1. Salary of a part-time medical officer.
2. Salary of the matron of the training school.
3. Salary of two lecturing nurses.
4. Salary of assistant secretary.
5. Upkeep of the training school.
6. Financial support to the centres.
7. Equipment, in part of new centres—£30.
8. Other expenses in connexion with propaganda work.

The District Health Centres are financed as follows:—

1. By municipal grants towards the salaries of nurses.
2. By Government subsidies on a £ for £ basis up to £125.
3. By financial help from the Association in regard to preliminary equipment and necessary towards general upkeep.
4. By small voluntary donations.

In addition, practically all the municipal authorities provide accommodation for the centres, either in rooms in the town hall or in centres which have been specially built for the purpose, such as—

Caulfield and Carnegie.
Hawthorn.
Northcote.
Prahran.

GROWTH OF THE SOCIETY.

Since its inception in June, 1917, with only one nurse, the Society has grown to the extent of 71 (seventy-one) centres and sub-centres, with 52 (fifty-two) nurses, and a model training centre with a matron. A propaganda sister and two lecturing nurses are also on the staff. Eighty-eight nurses have taken the course in mothercraft and infant welfare, according to the Annual Report of 1925. In addition, the work is being extended in many country districts by bush nurses, of whom 13 (thirteen) in all have also taken the training.

	1923-24.	1924-25.	Increase.
Individual babies attending centres	15,523	17,243	1,720
Total attendances of babies at centres	111,384	132,796	21,412
Total number of visits paid by sisters to homes	49,276	50,036	760

Propaganda.

This is undertaken by the following means :—

1. By the efforts of the Central Council of the Association.
2. By the appointment of a special propaganda sister.
3. By the local committees.
4. By the press, by articles published in *The Women's World* and *The Baby World*, which appear monthly.
5. By the Railway Department—

A. The Better Farming Train.—By the courtesy of Mr. Clapp, Commissioner of Railways, and Dr. Robertson, of the Agricultural Department, it is possible for demonstrations of mothercraft to be given on this train.

On the first tour a car was shared with another section, but as the mothercraft lectures were successful beyond all expectations, a car exclusively for Health Centre lectures was granted.

In all, fourteen tours have been undertaken, in which ten included the whole train, and four the women's section only, by special request.

By this means visits have been paid to 105 (one hundred and five) different places, where lectures and demonstrations have been given.

At least 20,000 (twenty thousand) women have attended, and advice has been given individually to 2,000 (two thousand) on mothercraft and ante-natal subjects.

Ante-natal advice has been given to 400 (four hundred) expectant mothers.

Lectures are given two or three times daily, which number up to the present time 322 to adults and 30 to school children. The total attendances of the school children amount to about 3,000.

It is interesting to note that the women frequently travel 20–30 miles at great personal inconvenience to attend these lectures, and such is their appreciation that many return with their husbands in the evening. When the train stays over one day, it is noted that fathers frequently bring their older children to listen to the lectures and demonstrations.

The fact that no less than five premature babies were brought to the notice of the sister on the last tour, and that by this means the mothers were taught the very special care that is needed in such cases, is sufficient evidence of the great value of this work.

At the lectures a great deal of literature from the Baby Health Centres is distributed.

In addition to the above, the Railway Department supplies moving pictures on such subjects as "The Spread of Diseases," "The Danger of Flies," &c., &c. These are demonstrated by the sister, and their universal popularity is shown by the equally large attendance of both men and women.

B. The Railway Department also assists the movement by supplies of literature prominently displayed on stations.

6. By two lecturing sisters—

A. A sister recently appointed by the Association lectures to school girls in the industrial areas (excluding the City of Melbourne area). At one school in Collingwood 300 children sat for an examination at the end of the course.

B. A sister who is attached to the City of Melbourne centres, but whose salary is paid by a voluntary gift, no monetary support being given by either Council or Government. In all, she visits 30 (thirty) schools, both public and private, where six weekly lectures on elementary mothercraft of half-an-hour's duration are given. In all, the classes have numbered about 2,958 children during the past three years. Of these, 1,109 sat for an examination at the end of the course.

In addition, lectures have been given to 29 mothers' clubs and 12 girl guide associations.

These lectures are undertaken by the same sister in Essendon, Hawthorn, and Kew, as well as in the City area, and for these services £30 in all have been contributed from these centres.

7. Monthly demonstrations are given at many of the centres for mothers, and special ante-natal courses are also given.

8. Other lectures and demonstrations are given as follows :—

- (1) To mothers' clubs—in connexion with the State school.
- (2) To Salvation Army mothers' meetings.
- (3) To church clubs.
- (4) To girl guides.
- (5) To Salvation Army girl guides.
- (6) To the new settlers' wives at the Elcho Farm once a month, by courtesy of the New Settlers' League.
- (7) To girls' freindly societies.
- (8) To Y.W.C.A. and sewing clubs, &c.
- (9) The Royal Agricultural Show.—The sisters were able to get in touch with hundreds of country mothers by this means.
- (10) Other shows in the country.
- (11) Baby week at Ballarat and other country towns.
- (12) Broadcasting of talks on mothercraft each week.
- (13) Health Week Campaign—
 - (a) A window in Myers Pty. Ltd. was lent for demonstrations given by one of the sisters.
 - (b) Picture films showing demonstrations.
- (14) Distribution of literature given freely from all centres.
- (15) Letters answered from country mothers. An average of 1,000 were received last year at the Training Centre, and many others at different centres.
- (16) By co-operation with the following :—
 - A. Concerning medical students.—A lecture has been given annually for two years to the medical students in the fourth year of their course by the medical officer of the Association. The centre at the Women's Hospital is also always open to medical students.
 - B. Victorian Bush Nursing Association.—It is compulsory since a fixed date that all bush nurses take the training of the Victorian Baby Health Centres Association. The Bush Nursing Association gives each nurse £25 while training.
 - C. Domestic School of Arts.—Lectures and demonstrations are given by the lecturing nurses in three of these schools.
 - D. Free Kindergarten Union of Victoria.—
 - (1) By lectures from medical officer to directors and trainees.
 - (2) By lectures and demonstrations from the lecturing nurse to mothers.
 - (3) By mutual co-operation in the district work.
 - (4) By the practical teaching of elementary mothercraft which is introduced unostentatiously into the games of the children.
 - E. Hospitals—
 - (1) Women's Hospital.—There is a centre held in one of the hospital rooms. The sister in charge interviews all women who have been confined in the hospital and who later return for their maternity bonus, and advises them as to the nearest baby health centre of either association in their district. At the same time she presents the mother with health centre leaflets. Patterns of baby clothes are also distributed to the women attending the ante-natal department, who also receive hygienic advice generally. The trainees of the Association attend the ante-natal clinics of the hospital as part of their course, and receive instruction from the doctors in charge.
 - (2) The Queen Victoria Hospital.—Trainees from the Health Centre also attend these ante-natal clinics. Cards are distributed to maternity patients in the wards giving the addresses of different health centres. At both the above hospitals many women attending the ante-natal clinics were advised to do so by the centre nurses, if they were not already under a private doctor.
 - (3) The Children's Hospital.—When any child under two years of age is discharged from the Children's Hospital or the Queen Victoria Hospital, a card is sent by the Medical Superintendent, with details of the history of the illness and the diet of the child, to the sister of the centre nearest to its home.

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Further co-operation is shown in the out-patient department by the sending of similar notices to the centre nurses by the honorary officers in charge, who request that reports on the progress of such cases may be sent to them at intervals.

- (4) The Foundling Hospital.—Health centre trainees attend during a period of six weeks to obtain experience in the actual handling of babies.
- F. The Education Department.—Regarding instruction of school girls in elementary mothercraft and in health matters.
- G. Child Welfare Department.—For the last few years, all foster-mothers have been instructed to bring any wards of State under two years of age to the baby health centres.
- H. The District Nursing Society.
- I. Benevolent Societies.—The Baby Health Centre nurses inform these societies of necessitous cases.
- J. The Talbot Milk Institute.—By the aid of the Talbot Milk Company, milk is given at reduced rates to poor or needy mothers. Small ice chests are lent or may be bought in weekly instalments, and ice is supplied at a greatly reduced rate.
- K. Voluntary Helpers' Association, formed in 1921, and affiliated with the Voluntary Aid Detachment of the Red Cross, supply voluntary helpers to each centre under an honorary organizer.

These helpers are given a short course at the South Melbourne Training Centre, after which they may take a voluntary examination and obtain a certificate. Each helper attends one afternoon a week at a centre, during which time she takes notes, weighs the babies, does test feeds, and undertakes any other duty to which the sister may assign her. She wears a distinct uniform.

One hundred and fifty-four helpers have attended the course of demonstrations. There are 90 helpers now active workers in the Baby Health Centres. The work of these helpers is most valuable and reliable both in regard to attendances and accuracy of work of the centres.

THE MODEL TRAINING CENTRE.

A training school and model centre was opened in South Melbourne in October, 1919, consisting of several rooms belonging to the Town Hall.

Before this date the idea of a residential training centre for nurses and a school for mothercraft had been entertained by the Executive of the Society, but owing to lack of financial support this model non-residential centre was substituted. Plans for such a residential training school are now under consideration.

The training of nurses was begun in 1920 in the model centre with nurses who attended ostensibly for three months, but often remained longer until a centre was available.

A medical officer was appointed in 1920 to lecture to the nurses at the centre, and at the Children's Hospital on Saturday mornings, on ante-natal care and the management and feeding of infants, &c.

In 1922 an arrangement was entered into with the authorities of the Foundling Hospital to provide cases of ante-natal and post-natal mothers and of infants fed both on the breast and artificially.

Conditions of entry for a Health Centre training—

- (i) The trainee must be a registered general hospital trained nurse.
- (ii) Preference is given to nurses possessing midwifery certificates in addition to general hospital certificates, and to those who have had war service.
- (iii) Bush nurses are accepted as trainees.
- (iv) In lieu of residence, £2 per week is paid to each nurse towards her maintenance while in training.

The present training includes—

- (i) A lecture each week by the medical officer of the Association on such subjects as ante-natal care, infant management and dietetics, and a special lecture on the attitude of a district health nurse to the medical profession.

A conference is held each Saturday morning by the medical officer with all the district nurses in Melbourne at the Children's Hospital, and after this conference, the trainees are taken around the wards by the medical officer for practical observation and instruction, particularly in cases of summer diarrhoea of infants.

- In addition to the above, the medical officer gives a clinic lasting for three hours, one afternoon each week, on special cases selected by the matron. During this clinic a full examination of the child is made and demonstrations are given in each case in regard to the condition of nutrition, dieting, weight, height, &c.
- (ii) Lectures and demonstrations by the matron.—Particular emphasis is laid on the importance of breast feeding and on the correct balance of infant foods.
 - (iii) Practical work in the centre under the supervision of the matron. This includes the—
 - (a) Care of the normal baby, both breast fed and artificially fed.
 - (b) Care of the malnutrition baby.
 - (c) Care of the premature baby.
 - (d) Instruction in the correct percentage balance and composition of foods, following on the teaching of Dr. Eric Pritchard, Medical Director of the Infants' Hospital, London.

A method of calculation originated by Sir Truby King is also now used with the same object, i.e., to obtain a food for infants which conforms as nearly as possible to the standard of breast milk.

- (e) Preparation of infants' food is undertaken both in the centre under the supervision of the matron and actually in the homes.
- (iv) Practical work in the Foundling Hospital, where the trainee attends daily for six weeks for further practical experience in the handling and care of the baby.
- (v) In addition to the above, diet classes are held daily by the matron on cases attending the centre, or visited in the homes, and each nurse has a case of her own on which to report. In order to do this thoroughly the nurse visits the baby actually in the home.
- (vi) One month of the training is devoted entirely to the care of five special cases under personal supervision in the homes.
 - (1) A normal breast-fed baby.
 - (2) A case for re-establishment of breast milk.
 - (3) A baby artificially fed. In this case the nurse makes the food herself and also teaches the mother how to do so.
 - (4) An expectant mother, to whom advice and help is given in matters of general hygiene.
 - (5) A premature or sickly baby. During this special month, the trainee gives her services if necessary at all times of the day up till 10 p.m., and including Saturdays and Sundays. In this way both mothers and nurses are educated in the management of infants under ordinary home conditions.

The nurse is expected to note every particular in regard to her cases, and to present the matron with a daily detailed report, which is corrected each day at the diet class.

- (vii) Routine work in the model centre includes training in the management of a centre, and the caloric estimation and the balance of the diets of visiting babies. Trainees are also taught how to interview attending mothers under the supervision of the matron.
- In addition, practical instruction is given in the cutting out of patterns for baby clothes.
- (viii) Ante-natal training.—Each trainee goes either to the Women's Hospital or the Queen Victoria Hospital twice weekly to attend the Ante-natal Department. In this way she is taught routine work and also receives instruction from the medical staff.

An examination is held at the end of each course and consists of—

- (i) A written paper of six questions which are set by the medical officer. This is corrected by the medical officer in conjunction with two other examiners, one of whom is on the honorary staff of the Children's Hospital, and the other on the staff of the Queen Victoria Hospital or Women's Hospital. The last examines particularly in the ante-natal work.
- (ii) An oral examination, in which the two outside examiners ask questions in the presence of the medical officer.
- (iii) A demonstration before the matron.
- (iv) A report from the matron of the work done by the trainee in the model centre and on the district.

A certificate is given to each successful candidate.

District Health Centres.

The work of a baby health centre nurse consists both of clinics in rooms or centres provided by the various municipal councils, and in visiting the homes.

The usual cost of a centre is £250 per annum. The salary of the nurse averages £200 per annum, but in some cases this is increased by a bonus given by the council.

At the weekly conference with the medical officer, in order to co-ordinate the work, each nurse has a "centre day" and chooses the subject on which the medical officer lectures, and also brings up several of her own cases for discussion. Every fourth Saturday a special lecture is given, either by the medical officer, or by a specialist, on the preventive aspect of his particular subject, such as eyes, ears, &c. These lectures are written down by the assistant secretary and sent round to all country centres.

In the centres the mothers attend at regular intervals to obtain advice in all details connected with their own health or that of their infants. Children may attend up to the age of two years.

No infectious case is received at the clinics, and no baby health centre nurse may visit cases in homes where there are infectious cases.

In the centre all children are examined, weighed, and measured, and test feeds are done when necessary. A monthly report is sent to the central executive. A card index register is kept at each centre, and records taken of every child. Great emphasis is laid on the importance of breast feeding, and no child is weaned without the consent of the private doctor.

It is a rule of the association that no patent foods are to be used, and that dried milks must only be ordered where the home conditions are unsuitable for the proper care and cleanliness of fresh cows' milk.

In all cases the infant's food must be suitably modified, and emphasis is laid on the importance of cleanliness of vessels and the home pasteurization or scalding of milk, together with the addition of fresh element, such as orange juice, &c. No nurse is allowed to give medicinal treatment of any kind. All cases of illness are referred to a doctor. Appropriate leaflets are given free at all centres.

In most districts the centre nurses call at the local registrars, and only by their courtesy obtain lists of births. Sometimes this has been refused. The nurse then visits all new-born infants, and mothers are invited to attend the centres.

In addition to the care of the baby, ante-natal advice is given regarding hygiene, exercise, rest, and diet, and in some centres special days are set apart for this purpose, and expectant mothers may attend by appointment.

Visiting in the homes is undertaken in cases where the mother is unable to attend the centre regularly, and if the baby needs special daily care and observation.

Milk grants.—Certified milk is supplied free or at much reduced rates to necessitous mothers by the generosity of the councils of Melbourne City, Brunswick, Kew, South Melbourne, Prahran. It is to be regretted that Fitzroy, Collingwood, and Port Melbourne have withdrawn their supplies, as the benefits derived from these grants are very great.

Management of Different Centres.

—Caulfield.—This is an excellent example of a model centre which was built and furnished at a cost of £1,200 by the municipal council.

The personal interest and generosity of the council was stimulated largely by the good work of the sister, who at first conducted the clinic in a room of the Town Hall.

The centre consists of a large room with folding doors, which may be used as a lecture room, and three other rooms.

A sandpit is provided outside for toddlers.

The staff consists of two nurses and twelve voluntary helpers.

Mothers attend the centre by appointment, and one day is kept entirely for ante-natal cases. These latter average twelve new cases per month.

A clinic demonstration is held monthly, and expectant mothers are encouraged to do simple demonstrations themselves, such as arranging an infant's cot, &c.

Every mother as a routine has a demonstration in the care and cooling of milk, and all babies are trained in regularity of feeding and habits generally.

New babies are always seen first and thoroughly examined by the sister. After the first attendance they are weighed weekly and measured each month, and a chart is kept to show their progress.

Test feeds are done as a routine on all breast-fed cases, and mothers are thoroughly taught the management of breast feeding.

All babies attending the centre, if unavoidably on artificial food, are ordered certified milk. One of the local dairies definitely undertakes to keep the fat percentage of the milk at a constant level of a little more than 3 per cent. There have been no cases of summer diarrhoea this summer and no deaths of babies visiting the centre.

The total cost to the council for its share in the maintenance of this model centre and that of Carnegie, which cost £900 to build, and in the salaries of the three nurses, amounts to about £706 per annum.

Prahran.—The Prahran Health Centre conducts a baby health centre in addition to clinics for the pre-school child and other activities, which include general health lectures to the public.

This is an example of a baby health centre which is run without local committee and in which the medical officer of health takes an active interest. Largely owing to his enthusiasm and the good work of the nurses, the council has provided excellent accommodation at a cost of £6,000, which includes a large lecture hall.

There is a staff of three sisters, one of whom undertakes the pre-school work as well as ordinary school work. The senior sister, who holds the diploma of the Royal Sanitary Institute, has recently been appointed by the council as an inspectress under the Health Act so that "she will have more power to enter and inquire at the various maternity hospitals in the city," and in this way "may obtain all births of Prahran residents early and be able to inform all other welfare centres of residents in their districts who have been confined in Prahran."

Figures published in the annual report of the medical officer for the year ending December, 1925, are as follows:—

	1924.	1925.
Total attendances	8,811	10,146
Individual babies .. .. .	.. .. .	1,122
New babies reported and visited	608	639
New babies at centre	604	681
Visits paid to homes	1,737	1,533

There have been no cases of summer diarrhoea under twelve months, and no deaths have occurred during the year among babies registered at the centre.

In addition to the usual grants towards the salaries of the nurses, the council supplies certified milk to poor mothers either at reduced rates or free of charge.

The Four City of Melbourne Centres.

There are four city centres—North Melbourne, Flemington, Carlton, North Carlton. The three former are run by committees of ladies, and the last one by a committee whose members are all wives of doctors and members of the Red Cross Association.

The council, in addition to a payment of £557 towards the nurses' salaries and an honorarium to a medical officer, also houses the centres at North Melbourne and Flemington.

A model health centre is almost completed in the residential area of North Melbourne, and it is hoped that a dental clinic for ante-natal mothers and pre-school children will also be instituted.

The Carlton centre is situated in the Women's Hospital.

A nurse attached to the City Health Department investigates all cases where an application is made for milk at a reduced price. In 1924 the cost to the council for milk grants was about £476.

The duties of the medical officer include the visiting of each of the centres once a fortnight. New babies are then medically examined and any help or advice necessary given to the sisters, and the records of the cases inspected.

Centre at Red Cliffs.

This is an example of a country centre in a new settlement area.

Largely owing to the enthusiasm of the women of the district, and with the help of theshire council, the services of a health centre nurse were acquired. A special building is now being erected at a cost of £550. For this purpose the Government give the necessary land at a nominal figure, and £260 was raised by the people of the district within a period of eight months.

Northcote is the only centre where the committee has raised the necessary funds to supply a car for the nurse. In this way she has been enabled to increase the number and extent of her visits.

Relationship of the Victorian Baby Health Centres Association to the Medical Profession.

The rules of the society are as follows:—

- (i) Each baby health centre shall be under medical supervision.
- (ii) In all cases where medical attendance is required, the mother should be referred to her own doctor, lodge doctor, or an institution.
- (iii) When advising the calling in of a doctor, the baby health centre nurse must in no case mention any name, or give any hint or preference in this direction.
- (iv) As soon as practicable each child should be seen by the medical officer of the baby health centre.

- (v) The baby health centre nurse must on no account undertake duties or assume responsibilities properly restricted to the medical profession.
- (vi) No nurse is allowed to advise the weaning of an infant without informing the doctor.

The association pays the salary of a part-time medical officer, who is responsible to the medical committee of the association.

SUMMARY AND CONCLUSION.

The Victorian Baby Health Centres Association, like the Royal New Zealand Society for the Health of Women and Children, is a society essentially for the education of the community in regard to the health of mothers and babies.

Since its inception in 1917 the growth of the society has been very rapid, particularly in Melbourne and its environs.

This is largely due—

- (i) To the excellent propaganda of the society, and to the work of the central executive.
- (ii) To the propaganda sister for her work in connexion with the association as the pioneer nurse in the movement, as sister in charge of the training centre, and finally for her excellent propaganda work throughout Victoria.
- (iii) To the enthusiasm and devotion of the district health centre nurses.
- (iv) To the voluntary helpers and their honorary organizer.
- (v) To the municipal councils for their interest in inaugurating centres and for their generosity in providing grants towards the salaries of the nurses, and for supplying accommodation in rooms or specially built model centres, and in some instances for providing milk in necessitous cases.
- (vi) To the Government for subsidizing the municipal grants towards the salaries of the nurses.
- (vii) To the local committees, some of whom have shown a most active interest in the movement.

We deprecate the fact that no residential training school and mothercraft centre has yet been established, and trust that the plans now under consideration will shortly be put into effect.

Up to the present the training of the nurses has been as thorough as is possible under existing conditions. Owing to constant observation of babies both in their homes or in the clinic, and the special detailed care and visiting of five typical cases on which the trainees have to report daily to the matron, the knowledge gained is very considerable, but we feel that the continuous observation of mothers and babies in a residential centre, as well as in the homes, is most desirable.

In theory the daily attendance of trainees for a period of six weeks at the Foundling Hospital should, to some extent, have taken the place of a residential centre, but in actual fact only one nurse at a time may attend, and although she gains experience in the actual handling of babies, she is not concerned with the details of the different diets. The association has been much handicapped by the fact that, while their teaching staff is responsible for the training of its own nurses, it has no connection with the Foundling Hospital.

The teaching of the trainees in the ante-natal departments of the Women's Hospital and the Queen Victoria Hospital is very good.

The care of the pre-school child should be considered more by the society. There is only one centre, in Prahran, dealing with these children.

The establishment of a correct relationship between the medical profession and the district nurse is much facilitated by the formation of a medical committee on which are two representatives of the British Medical Association, and also by the appointment of a part-time medical officer.

It is laid down in the rules of the association that each baby health centre should be under medical supervision, but owing to the rapid growth in numbers of the centres, and with only the services of a part-time medical officer, this is out of the question.

A conference is held weekly with nurses, but complete co-ordination and supervision is not at present possible.

The society is to be congratulated on its very rapid growth, especially in or near Melbourne. About eighteen country centres and sub-centres have been formed, but much yet remains to be done in the spread of the work throughout the State, and in the formation of more country centres.

D. SUMMARY.

New Zealand.

The Royal New Zealand Society for the Health of Women and Children.

Constitution.—1. An annual conference is held each year, consisting of delegates from all branch committees and the central council.

The central council consists of two general presidents, Sir Truby King and Lady King, a president, two or more vice-presidents, honorary treasurer, honorary secretary, and ten additional members of the association.

See section VI.A.

2. In New Zealand the local committees of the branches manage every centre, and part of the duties of these committees is to conduct active propaganda for establishment of further subcentres.

3. Finance.—In New Zealand, roughly, a third of the total expenditure is undertaken by the New Zealand Government. This amounted in the last financial year to £24,000; the remaining two-thirds is almost all supplied by voluntary effort, the municipal monetary help being negligible.

In New Zealand all Government moneys are paid directly to the central council of the society to be distributed. Large grants are given towards the building of the Karitane hospitals and towards maintenance, such as £2,000 per annum to the Dunedin Karitane Hospital.

In addition to subsidies towards the salaries of the nurses; the Government gives grants towards the salaries of the director of Plunket nursing, the assistant director of Plunket nursing, and the secretary of the central council.

Victoria.

1. "B." *The Society for the Health of Women and Children of Victoria holds an annual conference.

The officers of the society consist of a patroness, a president, four vice-presidents, two honorary treasurers, honorary secretary, assistant honorary secretary, a central executive committee, on which are members of various public bodies, and, in addition, an honorary advisory medical board.

There is a special house committee for the management of the "Tweddle Hospital," and a finance committee.

"C." The Victorian Baby Health Centres Association, has a general council, which meets annually, consisting of representatives from public bodies including two representatives from the Government of Victoria, two members of the British Medical Association, two members of the Victorian Medical Women's Society, one member from each municipality that supports a baby health centre, two members from each local committee (see section VI.C). From this council is formed an—

1. Executive committee.
2. A medical committee.
3. A training school committee.
4. A finance committee.

2. In Victoria, local committees usually, but not always, assist the councils in the management of the centres.

3. In Victoria the Victorian Government supplied £7,000 for infant welfare and clinics in the last financial year. Each centre is inaugurated by a municipal council, which makes grants towards the salaries of the nurses employed and also gives the necessary accommodation for a centre.

In Victoria all Government moneys are paid directly to the municipal councils; a subsidy on a £1 for £1 basis is given towards the nurses salaries.

"B." The central council of the Society for Women and Children of Victoria.

In Victoria only one grant is given by the Government of £500 per annum towards the maintenance of the Tweddle Hospital.

"C." To the central council of the Victorian Baby Health Centres Association no Government grant is given at present.

The Government subsidizes the salaries of the district nurses up to £125, but undertakes no monetary obligations towards salaries of a propaganda sister or nursing lecturers, or secretary.

* In future pages "B" will stand for the Society for the Health of Women and Children of Victoria, and "C" will stand for Victorian Baby Health Centre Association.

New Zealand.

4. Growth.—Period of existence of the Royal New Zealand Society for the Health of Women and Children, nineteen years.

Number of hospitals and mothercraft training schools (residential).—Five in existence and one being now erected.

Fifty-nine branches with 359 out-stations.

Number of Nurses.—

Director.

Assistant Director.

Instructional nurse.

5 matrons.

9 sisters.

98 district nurses.

15 relieving.

Number of Karitane nurses at present in training is 49.

Number of New Zealand babies under the Plunket nurses for the year 1924-25 equals 37,808.

Visits paid to homes by Plunket nurses—147,151.

5. Propaganda.—In New Zealand widespread propaganda is undertaken, particularly by branch committees (see section VI.A).

6. Training schools and mothercraft centres.—There is one central Karitane hospital in Dunedin for the residential training of Plunket nurses. Karitane nurses are trained in all five hospitals. There are mothercraft centres attached to each Karitane hospital.

7. Conditions of entry to training school.—Nurses with either a general training centre or a midwifery certificate are admitted for the Plunket training.

8. Training of a Plunket nurse.—Duration, four months residential; this includes a fortnight on the district for a general hospital certificated nurse.

Six months for a midwifery certificated nurse.

Training of Karitane nurse.—Previously untrained, twelve months.

(See section VI.A)

Victoria.

4. Growth.—“B.” Period of existence of the Society for the Health of Women and Children, six years.

“C.” Period of existence of the Victorian Baby Health Centres Association, nine years.

“B.” Number of hospitals and mothercraft training schools (residential), one Tweddle hospital.

“C.” Victorian Baby Health Centres Association, model training centre (non-residential), one

“B.” Five municipalities—Five centres, two sub-centres.

“C.” Thirty-eight municipalities have provided centres and sub-centres amounting to 71.

Number of nurses.—

“B.” 1 matron.

2 sisters.

7 district.

“C.” 1 matron.

1 propaganda sister.

50 district nurses.

1 relieving nurse.

2 lecturing nurses.

“B.” Number of Primrose nurses at present in training is six.

“B.” Number of Victorian babies under the Victorian Plunket nurses, 2,080.

“C.” Number of Victorian babies under the Victorian baby health centre nurses, 17,243.

“B.” Visits to homes, 5,801.

“C.” Visits to homes, 50,036.

5. Propaganda.—In Victoria similar widespread propaganda is undertaken by both associations.

In Victorian Baby Health Centres Association, this includes a special propaganda sister on the Better Farming Train and several lecturing nurses.

In addition, both associations broadcast advice to mothers each week.

(See section VIB. and C.)

6. Training schools and mothercraft centres.—“B.” There is one training school mothercraft centre (residential), the Tweddle Hospital, where both Plunket and Primrose nurses are trained.

“C.” There is a non-residential model centre, and plans are now under consideration for a residential hospital and mothercraft training school.

7. Conditions of entry to training school.—

“B.” Similar to New Zealand.

“C.” Only nurses with a general hospital certificate or a general hospital and midwifery certificate are admitted to the training school.

Bush nurses are accepted as trainees.

8. Training of nurses in Victoria.—“B.” Similar to New Zealand.

“C.” Duration, three and a half months non-residential. It includes one month for special district work, six weeks daily attendance at the Foundling Hospital, and the remaining time in the model training centre, with attendance twice weekly at the ante-natal clinics.

New Zealand.

9. Curriculum of training.—The curriculum includes:—General care of the mother and infants, with special attention to breast feeding and the dieting of the normal healthy baby.

Special attention is paid to caloric values and calculations, percentage composition, the protein ratio and its significance on lines laid down by Sir Truby King.

10. Examinations and certificates.—The examination held at the end of the training includes:—

- (i) A written paper in which questions are set by (a) the Director of Child Welfare; (b) two other examining doctors.

This is corrected by the Director of Child Welfare, who marks all questions, and by the two examining doctors.

- (ii) A detailed report from the matron.
- (iii) The district nurse's report on the fortnight's work on the district.
- (iv) An oral examination by the two examining doctors.
- (v) A demonstration given by the trainee before the director of Plunket nursing and the matron.

A certificate is given to each successful candidate.

Refresher courses are instituted every three years for Plunket nurses.

11. District work of nurse.—Consists of holding clinics in rooms usually rented by the branch, and in visiting the homes with the main object of keeping normal babies healthy.
(See section VI.A.)

12. Notification of births, early.—In 1922, owing to the enlightened action of the Minister of Internal Affairs, it was arranged that notifications of births must be given in to the registrar within 70 days of birth. Official lists are sent daily to the different branches of the society, which then make a courteous offer of the services of a Plunket nurse to the mothers.

Relationship of the society to the medical profession in New Zealand. (See section VI.A.)

Victoria.

(See section VI.B and C.)

"B." Training of Primrose nurses, twelve months.

9. Curriculum of trainings.—"B." Exactly similar to New Zealand.

"C." The curriculum includes:—General care of the mother and infants, with special attention to breast feeding and the dieting of the normal healthy baby.

Particular attention is paid to instruction in the correct percentage balance and composition of foods, following on the lines laid down by Dr. Eric Pritchard, Medical Director, Infants' Hospital, London.

The method of calculation originated by Sir Truby King is also now used with the same object, i.e., to obtain a food for infants which conforms as nearly as possible to the standard of breast milk.

10. Examinations and certificates.—"B." Similar to New Zealand.

"C." The examination of the baby health centre trainees includes:—

- (i) A written paper of six questions which are set by the medical officer in conjunction with two other examiners, one of whom is on the honorary staff of the Children's Hospital and the other on the staff of the Women's Hospital, or the Queen Victoria Hospital. The last examines particularly in the ante-natal work.

- (ii) An oral examination, in which the two outside examiners ask questions in the presence of the medical officer.

- (iii) A report from the matron of the work done by the trainee in the model centre and on the district.

- (iv) A demonstration before the matron.

A certificate is given to each successful candidate. At present there are no "refresher courses" instituted in Victoria.

11. District work of nurse.—In Victoria similar work with the same object consists of holding clinics in rooms or model centres supplied by the different municipal councils and in visiting the homes.

(See section VI.B and C.)

12. Notification of births, late.—In Victoria in most districts the nurses call on the local registrars and only by their courtesy obtain lists of births. This information is sometimes refused. The Victorian baby health centre nurse then visits all new-born infants, and mothers are invited to attend the centres. The Plunket nurse in Victoria sends an invitation to the mother offering her services as in New Zealand.

In Victoria notification may be delayed, as it is not necessary to register the birth before 60 days.

Relationship of the societies to the medical profession in Victoria.

(See section VI.B and C.)

Conclusions.

One of the main differences between the societies concerned with infant welfare in New Zealand and Victoria is that in the former country the association is mainly run by voluntary effort aided by Government monetary grants and subsidies.

In Victoria the centres are run directly under the municipal councils, aided by Government subsidies and voluntary committees. We consider that this method is on a sounder basis, provided that all councils are made to realize their responsibilities in maintaining infant welfare centres as part of the necessary Public Health work in each community. In this way funds would be automatically available and not dependent on any personal enthusiasms nor interests, nor on the stimulus due to any one personality.

On the other hand, much of the success of the movement in New Zealand is due to the interested committees of men and women. If this spirit animates the local committees in Victoria to the same extent, the movement will spread with even greater rapidity than has been the case heretofore.

As an example, in New Zealand, twelve country centres have supplied cars for the nurses, and in this way have enabled them to cover much larger areas.

The value of interested committees in regard to propaganda generally is incalculable.

In New Zealand there are five Karitane hospitals and mothercraft homes, and a sixth hospital is in course of erection, while in Victoria there is only one. There is no doubt in regard to the value of these centres, both as residential training schools, and for mothercraft teaching and for the actual treatment of difficult breast-feeding cases. Until the number of these mothercraft centres is increased in Victoria, it will be impossible to get a satisfactory increase in the number of babies wholly breast fed until the ninth month.

The paramount importance of this need was realized at the first general congress on child welfare held in Geneva, August 24-28, 1925, when the following extract from a resolution on the proper feeding of infants was adopted unanimously:—

“With regard to infants, the first general congress on child welfare considers breast feeding the only proper method of nourishment, except where medical advice is opposed to this course.”

In New Zealand there is a director of child welfare under the Health Department, and under him is a director of Plunket nursing. By this means the movement is co-ordinated and uniformity is maintained. It is to be regretted that, up to the present, there has been no equivalent position in Victoria. A part-time medical officer was appointed by the Victorian Baby Health Centres Association, but owing to the rapid growth of the society, it has been impossible for each centre to be visited at regular intervals.

Owing to different methods of compiling statistics, we have found great difficulty in collecting comparative figures. The numbers of attendances at the clinics both of the “Royal New Zealand Society for the Health of Women and Children” and of the “Victorian Society for the Welfare of Women and Children” include both mothers and babies, and it is impossible to gain accurate knowledge of the number of individual babies.

Similarly the figures of both societies relating to breast-fed babies include only new cases attending the centre each month, and give no indication of the actual numbers on the breast of babies under nine months.

In the clinics of the Victorian Baby Health Centre Association, a calculation is made of all individual babies attending the different centres during each month, and of all babies attending the centre who are breast fed, including both old and new cases.

In the rules of all three societies we note that the final object of all “to co-operate with any organization working for the same or cognate objects.” In view of this statement and the fact that the aims and objects generally are identical (see section VI.A and section VI.B and C), it is highly regrettable that public dissension has materially retarded the progress of the child welfare movement in Victoria.

The fact that the ultimate object is the health of the child, “to keep the well baby well,” seems to have been totally forgotten on occasions, and personal acrimony has entered into a sphere from which it should be far removed.