



HISTORY OF THE CHILD HEALTH AND DEVELOPMENT BOOK PART 1: 1920 TO 1945

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Abstract

The New Zealand child health and development record book (also known as the Well Child/Tamariki Ora Health Book or Plunket book) has recorded the history of infant-rearing practices in New Zealand for almost 100 years. Since its initial publication it has been used by mothers and health professionals to track the health and development of children under the age of five years. The book also provides insight on the development of mothering practices and provides commentary on the medicalisation of mothering and the emergence of mothering as a science from the time of its inception. This article, part one of two, explores the history of the Plunket book during the years of 1920 to 1945. Information for this article stems from both primary and secondary sources, including an extensive collection of Plunket books from across New Zealand. The findings chronicle the development of a medicalised relationship between mothers and health professionals. The exploration reveals that the rise of scientific mothering coincided with the devaluing of women-centred mothering knowledge, and as a result the language that described women's mothering experiences was silenced.

Key words: Maternal and child health, history of nursing, New Zealand, Plunket, child health and development record book

Introduction/Background

The New Zealand child health and development record book (also known as the Well Child/Tamariki Ora Health book or Plunket book) is a small booklet given to New Zealand mothers on the birth of a child. Since the 1920s it has been used as a tool by mothers, nurses and other health professionals to record growth and development of a child from birth to five years. Despite weathering numerous social changes across the past five generations, including transformations in child-rearing practices, modifications in nursing practice and changes in society as a whole, the Well Child/Tamariki Ora Health book remains an expected element of motherhood in New Zealand today. Mothers have used the book as a tool to link past with present, to maintain kinship ties across generations, to

deal with change intergenerationally, and in a manner that contributes to their self-identity as women and mothers.¹ As part of a larger study exploring the role and impact of the Well Child/Tamariki Ora Health book in New Zealand society, the first section of this two part article outlines the history of the book from its inception in 1920 to 1945. We argue that a persisting medically dominated discourse in the book had the effect of encouraging mothers to rely on methods of "scientific motherhood" as a means of raising their infants, resulting in a profound impact on women's ability to breastfeed and a reliance on outside sources to support their mothering. In addition, this exploration

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highlights how women's own mothering knowledge becomes subservient to the hegemonic discourse of medicine.

Historiography (the method of historical investigation) includes both uncovering historical occurrences and understanding why these may have taken place.2 It is particularly useful to nurses investigating the social, political, economic and historical contexts associated with societal change and the impact of these on the practice of nursing.3 Data collection revolves around the identification and sourcing of primary and secondary data and the verification and evaluation of this material. Primary data is text, photos and other sources that were created at the time under investigation and secondary data is that written at a later date about the time in question. Wood describes the dimensions of primary historical data evaluation as provenance, purpose, context, veracity, and usefulness.4 Such critical evaluation of historical data is essential to ensure reliability and validity of the research - one source should not be considered a factual representation of a situation, but two or more that report the same occurrence may enable stronger conclusions to be drawn. Although historical research is not traditionally aligned with any particular epistemological approach,5 we bring a critical perspective to this work, based on an assumption that knowledge is shaped by historical, social, political, gender and economic conditions that for some people, particularly women, can be oppressive.⁶ By taking a critical perspective, we seek to understand why a phenomenon has occurred and how we can use that knowledge as a basis for change.7 Understanding how and why such a small element of nursing practice can have such a profound impact on mothers and their mothering experience over time enables nurses today to consider the implications of contemporary practice on the potential future outcomes of healthcare.

The sources of information for this article include

both primary and secondary historical sources and in particular a collection of 54 Well Child/Tamariki Ora Health Books that a wide number of people across New Zealand shared with the first author by for her PhD research. The earliest book in the collection is from 1921, with the most recent 1998. There are at least two books from each intervening decade. Photos characterising the books are included where relevant and where the books are referred to in the text they are referenced by descriptor and date. Originals of these books have not been retained as many families consider them family heirlooms to be passed from mother to child, however the first author retains copies of all of the books with the permission of contributors.⁸

The origins of the book

In 1907 Frederick Truby King, superintendent of the Seacliff Mental Hospital near Dunedin, New Zealand, staunch advocate of breastfeeding and later Director of the Division of Child Welfare in the Department of Health founded the Society for Promoting the Health of Women and Children.9 Later known as the Royal New Zealand Plunket Society, or simply the Plunket Society, the aim of this organisation was to build on work initiated by Truby King, his wife and the 'nurse'10 he had trained.11 This work involved advocating for breastfeeding, the preparation of 'humanised milk' in cases where breastfeeding was unsuccessful, the distribution of humanised milk, and the education of women in the correct way to feed and care for their infants known as the 'Truby King method'. 12 Although Truby King was instrumental in the establishment of the Plunket Society and was involved in it in a variety of capacities up until his death in 1938, the organisation and administration of it was by women. It was largely a women led organisation. In a similar fashion to movements in the USA and the UK, New Zealand maternalists used the Plunket Society as a means of promoting the interests of women and mothers and the health of their children.13



One of the early ways in which the Plunket Society sought to spread its message of healthy infant care was through the employment of nurses. The employment of nurses and development of the nursing arm of the Plunket Society occurred as a precursor to the publication of the first child health and development record books. A brief overview of the development of nursing in the Plunket Society provides some context for the development of the book.

Plunket nursing developed as a distinct specialty of nursing practice from around 1914 when it was decided that only nurses who had a minimum of three years hospital training and were on a government register (registered nurses) would be accepted for Plunket nurse training. 14 Prior to this there was no requirement that Plunket nurses be registered nurses. By 1920 the Plunket Society employed 55 registered nurses. 15 There was a large concentration of nurses around the Dunedin and Southland regions, with the remaining nurses spread the breadth and depth of the country.16 In an attempt to address the professional development needs of Plunket nurses, on the 16th July 1919 Plunket nurse Anne Pattrick was offered the position of 'Travelling Plunket nurse'.17 In appointing Anne Pattrick, Plunket formally recognised the need for Plunket nurses as a whole to have some type of practice guidance and support for their work. Parallel with the development of Anne Pattrick's position, changes were also occurring in nursing practice.

In November 1920, the Society's Central Council, made a decision to proceed with the printing of small booklets to be held by the mother and brought with her when taking her baby to the Plunket rooms. 18 These booklets were for the Plunket nurse to record instructions for such things as feeding regimes and care of the baby. The booklets were to be known as the 'Baby Record'. This name remained until the late 1950s when it became the 'Baby Record Book'. In the early 1970s it was known briefly as the 'Plunket

Record Book' until publication was taken over by the Department of Health in the early 1980s and it became the 'Health and Development Record'. Today it is known as the Tamariki Ora/WellChild book but it has been commonly referred to by the New Zealand public since the 1920s as the 'Plunket book' and will be referred to as such in this article.

Once Central Council approval to print the Plunket book had been gained, it was not until late 1922 that formal confirmation is noted in the Central Council minutes that the books were now being used by the branches. ¹⁹ The cost of developing and printing the Plunket books was also noted when the Dunedin Branch mentioned a large outlay for printing of Case Sheets for the new case-recording system and printing of the *Baby Record Books* in the same report. ²⁰ (The book came into use at the same time as 'A uniform system of book-keeping and case-recording' was implemented for nurses. ²¹) However, the books were in use as early as June of 1921 in Christchurch and possibly earlier in Dunedin. ²²

While it is possible to believe that the development of the Plunket book arose as a result of improvements in nursing practice and the desire to provide good care to mothers and their infants, the book also ensured Plunket nurses could maintain vigilant supervision over the actions of the mother. Where the book was created as a tool of practice, this cannot be seen as separate from the idea that the nurse and nursing practice at the time were products of hegemonic biomedical practices. For example, by 1928, Plunket nurses appointed to permanent positions had a minimum of four years training²³ – all of it based in hospitals under the guidance of doctors. Notions of pathology and the idea that bodies could be screened, surveilled and controlled to identify potential risk rather than actual illnesses underpinned part of the development of the book.24 Hence the book itself became a tool of surveillance. Plunket nurses, and their use of the Plunket book, therefore, contributed



to the construction of a motherhood that was heavily influenced by the biomedical model. Erik Olssen argued that the Plunket Society's persistent messaging perpetuated a 'prescriptive ideology' and that structure and routine came to define the New Zealand 'character' during this time period.²⁵ Linda Bryder, however, contends that women were given insufficient credit for being able to choose whether or not to use Plunkets' services or follow the advice given.26 Philippa Mein-Smith agrees, suggesting that Olssen's 'prescriptive ideology' was tempered by the actual practice of mothers.²⁷ Bryder also argues that the autonomy and practice of Plunket nurses served mothers well over the course of the 20th century describing the Plunket nurse as a 'New Zealand icon'.28 Olssens', Bryders' and Mein-Smiths' perspectives likely have some merit in this early time period. The Plunket book undoubtedly contributed to the manner in which the New Zealand mother raised her children, and analysis of the book enables us to consider both perspectives in light of what mothers and nurses wrote in the books over time. This will be revisited in part two of this review.

The Plunket book was one of many publications that contributed to the biomedical model of scientific care of infants and children, also known as 'scientific motherhood'.29 Scientific motherhood saw women become increasingly reliant on the direction of medical experts for advice on how to raise their children. As early as the 1840s publications started to appear in America that encouraged women to seek scientific sources of information on child care.30 By the turn of the century, advertisements exhorting mothers to select products according to their scientific merits along with various articles and advice in women's magazines were abundant.31 This early movement toward scientific motherhood, however, was not reflected in New Zealand. Artificial infant formula, for example, although available in America and Britain from the 1840s, was not available in Australia until the

1880s and in New Zealand until the 1900s.32 Although advertisements in New Zealand newspapers offered infant feeding bottles for sale from around the 1860s,33 it was not until around the time the Plunket Society was established in 1908 that ideas of scientific motherhood were perpetuated through the media in similar ways to those in America. The newspaper column Our Babies (written by Hygeia who is believed to have been Truby King's wife Bella³⁴) appeared in numerous newspapers throughout New Zealand from 1907, along with the booklets Feeding and Care of Baby from 1908 and What Baby Needs from 1912 - both written by Truby King.35 Numerous other publications by Truby King during the period 1910 to 1920 similarly exhorted strict feeding regimes and medically directed care of infants and children.36 These publications were similar to the publications that came out of the Children's Bureau in the United States at about the same time advocating similar techniques of scientifically directed child care.37 The Plunket book was a further means of ensuring adherence to these techniques of scientific motherhood.



Figure 1: Plunket book from 1921



Figure 2: Plunket book from the 1930s

Note: Printed with permission of the Royal New Zealand Plunket Society (2014, 12 February).

The early books: 1921 to 1945

Books during the period 1921 to 1945 were a tan colour with black writing and were approximately 10cm x 13cm in size. There was a logo on the front and rear covers that depicted a woman holding an infant in her arms swathed in a blanket (see Figure 1).



By 1932 the logo had changed to that of a breastfeeding mother (see Figure 2). There was an old French proverb at the start of the Plunket books from this era:

The most loving act a mother can do is to nurse her baby. Nothing can ever replace the milk and heart of a mother.³⁸

The quotation reflected one of the aims of the Plunket Society and Truby King: to promote breastfeeding as the optimal way to feed baby. It remained in all Plunket books up until 1952. By 1954 the proverb was gone from the Plunket Society's books but remained in Health Department issued books (used by public health nurses³⁹) up until 1962. The intention of the Plunket Society was to support breastfeeding and offer an appropriate alternative if breastfeeding were not possible. The formation of the Karitane Products Society in 1927 to market the humanised milk products Karilac and Kariol developed by Truby King as appropriate alternatives to breast milk supported the Plunket Society in its work, however, raises questions over the priorities of the Society and its intentions to support breastfeeding. Karilac was a sugar mixture added to whole cow's milk that was designed to resemble the sweetness of human milk. Its ingredients were lactose, glucose and gelatine. 40 Kariol (a fat emulsion – also known as NZ emulsion) was designed to supply the fat content of human milk and consisted of vegetable oil, cod liver oil and dextrose. 41 Advertising by the Karitane Products Society and another infant formula company Glaxo helped to normalize the process of artificial feeding and further encouraged women to accept scientific methods of infant care.42

The simple text printed in these early books reflected the dogma of the time with regard to the strict parenting routines advocated as the most effective way to maintain the health of baby – health that, according to Truby King, was paramount to maintaining and strengthening New Zealand's population and

reducing New Zealand's high (although declining) infant mortality rate.⁴³ The book outlined a set of 'baby's needs' including '...ensuring an abundance of pure, cool, outside air' and 'No night feeding'.⁴⁴ The instructions were underpinned by the following: 'To prevent risk of mistakes by the mother, the Plunket Nurse will enter clearly in this book any recipe for food she may order.'⁴⁵ As noted earlier, one of the key reasons for the introduction of the book was that the Plunket Society clearly thought the book would assist the mother to follow the directions of the nurse more accurately, thus ensuring adherence to the Truby King method. These instructions included not only the directives printed in the book but also those that were added by the nurse.

The weight chart took up an entire page of the book with a graph on one side depicting pounds up the X axis and age in weeks along the Y axis. On the opposite side of the page was a chart where the weight has been written in numbers with the date. Weight was a key measure of infant health and phrases such as 'bonny baby' and 'Plunket baby' reflected a chubby, apparently healthy looking infant. An infant gaining weight was a healthy infant and inclusion of charts to measure an infant's weight was a simple means of gauging the health of the infant. Measuring weight was also a further example of the influence of scientific methods of child rearing, and enabled additional surveillance and monitoring of a mothers' actions.

Throughout the 1920s and into the 1930s, the content written by the nurse in Plunket books was both descriptive and prescriptive. The nurse would describe the current state of the baby such as 'baby well' or 'quite normal'.⁴⁶ The nurse would then offer advice to the mother – often on feeding and occasionally on the treatment of minor conditions such as skin rashes. The advice offered by Plunket nurses in the Plunket book was, however, seen as problematic by some. By 1930, doctors were embroiled in a number



of arguments with Plunket nurses over who should be providing what type of care to whom. Doctors did not believe nurses should be undertaking diagnoses and by 1934 nurses were ordered to remove references to baby illnesses in their annual reports.⁴⁷ Examination of the early Plunket books provided examples of why doctors may have been concerned that nurses were undertaking diagnosis and prescription of care:

In 1929: "Give 1 table sp of cooled boiled water before feeds until rash is better".⁴⁸ In 1931: "Breast fed 4 hourly. Slightly jaundiced, skin soft. To have magnesia each day till trouble cleared up".⁴⁹

By Plunket nurses actively undertaking prescribing (defined as 'to direct to be used as a remedy'⁵⁰), doctors were concerned that their increasing mandate in this area would be undermined. By 1941, doctors had secured for themselves the sole right to be funded to prescribe medications to the general public.⁵¹

Despite doctors successfully lobbying government for the sole right to be funded to prescribe and to force nurses to remove any references to diagnosis, Plunket nurses clearly continued to work with families in much the same way as previously, in particular with regard to the writing of prescriptions or directives within the books which continued well into and beyond the 1940s.⁵² The need to prescribe care to mothers again reflects the biomedical paradigm of the time; the nurses clearly believed that the best way for mothers to raise their children was under the direction of a scientifically trained professional.

One of the key pieces of advice offered by Plunket nurses in the Plunket book was to 'keep the baby outdoors'. This was not only printed in the books but also reiterated by the nurse. For example, in one book from 1933 under 'Helpful Remarks, Advice and Instructions', the nurse has written 'Keep baby out

of doors all day. Have windows wide open at night keeping baby out of draughts'. The emphasis on fresh air and sunshine was designed to prevent rickets. The addition of cod liver oil to the diet was for the same reason. Baby was also required to be woken for feeds and to be fed at the same time each day with the times stringently listed by the nurse in the book. Advice was also provided for the mother and in the same book the nurse has written the following:

For Mother. Take three good plain nourishing meals a day. No between meals, no rich foods. Drink a cup of water every time baby is fed. Have plenty of fresh fruit and vegetables — whole meal bread. Have a good walk out of doors every day. Rest for an hour in afternoon with feet up. Sponge nipples before and after each feed with boiled water and fresh piece of cotton wool. Dry nipples well afterwards.⁵⁶

Another area of emphasis in these early books was bowel motions. Most of the books have an entry at the bottom of each visit describing the current state of the bowels. This would usually be along the lines of 'motions normal' or 'motions hard' although some were more descriptive including 'motions curdley [sic]^{'57} and 'motions a little sluggish'.⁵⁸ More often than not, a simple N was written at the bottom of the page indicating that bowel functioning was "normal". The emphasis on monitoring of bowel motions was for two reasons. First, in the late nineteenth century and into the early twentieth century many infant deaths were attributable to diarrhoeal disease.59 Monitoring of bowel motions enabled the mother or nurse to pick up early signs of illness and treat accordingly – hopefully preventing avoidable death. The second reason behind the emphasis on monitoring bowel motions was to ensure regularity of habits. Truby King believed that mothers who reared their children following his methods emphasising such regularity would raise children who were '...of sound character and pure in



thought'.60

Although most of the writings in the early Plunket books were inclined toward clinical advice, some nurses commented on things specific to baby. For example, from a 1939 Plunket book, when 'Vera' is 33 weeks old, the nurse has written 'diet slip given'.⁶¹ Several weeks later, the nurse has written that Vera 'does not take very kindly to vegetable puree'.⁶² Other examples include the commonly used 'sturdy boy'.⁶³ and 'fine baby boy'.⁶⁴

Recipes provided by Plunket nurses during this time were for foods that were simple yet nourishing - oat jelly, barley jelly, apple in muslin, prune pulp and juice, crusts and butter, semolina, spinach puree, knuckle in soup.65 Mothers who were bottle feeding their babies were given careful directives on preparing milk mixtures. Entries into Plunket books show that meticulous adjustments were made according to baby's weight and tolerance of the previous week's regime. Plunket nurses used carefully formulated charts to determine the exact quantities to feed baby. 66 Various charts and formulae for calculating milk percentages and caloric values in artificial milk had been developed over time, starting with those by Thomas Morgan Rotch, Charles W. Townsend, and Maynard Ladd in the late 1800s and early 1900s.⁶⁷ Truby King also developed formulae most likely based on those from overseas.⁶⁸ In addition to humanised milk, a strong emphasis was placed on vitamin C intake and mothers were encouraged to feed their infants orange juice. 69 The recommendation to offer orange juice and cod liver oil to artificially fed babies was to make up for any loss of vitamins in artificial milk through the manufacturing process. Orange juice supplementation was intended to prevent scurvy and as noted above, cod liver oil was added to prevent rickets.70

The entry into this book from 1932 was typical: (Baby is 23 weeks old and weighs 14 pounds 5 ounces.)

Completely weaned.

<u>5 feeds 7oz.</u>

Emulsion ¼ teaspoon a day.

Orange Juice.

40oz recipe Milk 171/2oz Karilac 3 level tablespoons Boiling water 221/2 ounces.⁷¹

Another common suggestion around this time was to offer baby a bone to chew on - presumably to assist with teething.⁷² It was also common, if the baby was restless, to give baby cooled boiled water prior to feeds. The underlying rationale was that the boiled water would settle baby and ease wind.

Stringent advice continued to be offered on feeding regimes. As in the book from 1929, in a Plunket book from 1933, the mother is advised to give baby 10 minutes on one breast and 5 minutes on the second. The eeding an infant four hourly and not at night resulted in what may well have been an adequate milk supply dwindling and supplementary feeding then being required. This pattern can be traced throughout many of the Plunket books. Mothers would initiate four hourly feeding and by the time baby was a few months old, supplementary feeding had been started as mother's milk supply reduced.

For those mothers not breastfeeding, the effort required to prepare the humanised milk advocated by the Plunket Society was enough to take up several hours. As an example, a mother in 1941 was given very clear directions on preparing meals for her 2 wk old infant:

Feeding 3 hrly, 6 feeds daily
7am, 10am, 1pm, 4pm, 7pm, 10pm
10 ½ milk
10 ½ water – boiling
1 ½ tbsp Karilac



<u>Kariol</u>: ½ tsp increase by ¼ tsp daily to 4 level tsp in the day divided between the 5 feeds
<u>At 3 weeks:</u> Orange juice ½ tsp in ½ tsp warm boiled water

Give extra water daily

Dissolve Karilac in the boiling water. Add to the milk. Boil 3 minutes. Re-measure and make up to 20oz again with boiled water. Strain. Cool quickly.

Keep cool. Stir before using.75

From 1920 until 1945 mothers were encouraged to visit the Plunket rooms once a week to have their baby weighed. Plunket books have had age-specific weight charts in them since their inception. There is varying emphasis on feeding or weight in different books from this era indicating no particular aspect was targeted by the Society in the early days of the book. For example, although weight was clearly the emphasis in one book from 1921, a book from 1929 does not have the weight chart filled in at all.76 This is unusual as most books had the weight chart carefully completed. The instructions to the mother in the 1929 book are, however, detailed and include encouraging feeding from both breasts alternating the starting breast at each feed, winding, holding baby out at bathing and encouraging mother to have a rest each day.77 By 1937 there were two weight charts in the book, one for baby up to 9 months and the second from 10 months to 18 months. There continued to be the line representing the average on the second chart but with the addition of a disclaimer at the bottom of the page that stated: 'Average for Girls, slightly less. Average for Boys, slightly more'.78 The chart was located at the front of the book and was one of the first things to be seen when opening the book.

By the mid 1930s, the economic depression was starting to have a major impact on the lives of working class New Zealand families.⁷⁹ Wages had been cut and unemployment was at record levels.⁸⁰ These

circumstances also impacted on the Plunket Society itself and in 1931, Plunket's Central Council reduced Plunket nurse salaries.81 The Plunket books from this era, however, do little to reflect any of the economic hardship suffered at this time. Writings in the books in the 1930s consisted of the same instructions found in the books in the 1920s. This may be because the majority of women using the services of Plunket were middle class. Some historians have argued that the hardships suffered throughout the depression were class-based between the employed and the unemployed, indicating that the depression highlighted inequalities between the two that eventually lead to the introduction of a universal social security system.⁸² The middle (employed) class were affected by the depression differently and the impact was more clearly seen in the changed hopes and aspirations of the generation growing up during this time.83

Motherhood throughout this period was challenging. During the Depression, May surmises that women were largely powerless yet managed to survive through initiative and hard work.84 The experience of having to make do with what was available shaped women in New Zealand to be resourceful and industrious, setting them up well to cope with what World War Two brought them. However, the experiences of World War Two and the Depression meant that politically New Zealand moved into an era where elections were won based on the economic and social security net respective policies could provide.85 The introduction of the 40 hour working week and the basic male wage by the 1935 Labour government continued to ensure women remained in the home and that their primary role was that of mother and housewife.

By 1938, the impact of the economic depression was clearly continuing to affect the Plunket Society. For the first time, at least in the Auckland region, Plunket published in the Plunket book a note calling for mothers to help maintain the Plunket Society by becoming



an annual subscriber.⁸⁶ Despite the fact that by this time the country was clearly on its way out of the Depression due to a range of fiscal policies introduced by J. G. Coates,⁸⁷ the incumbent New Zealand Prime Minister, the Plunket Society continued to ask for a donation for services provided and continues to do so today. The Depression however, ensured the passing of the Social Security Act 1938 into law occurred with little protest although doctors offered some opposition arguing successfully for the right to charge a top up fee for general practitioner services.⁸⁸ The new Act introduced a range of welfare reforms that guaranteed state support from 'the cradle to the grave'.⁸⁹

As women remained within the home during this period, child care and parenting practices continued into the 1940s much as previously. The techniques of scientific motherhood continued to dictate that the mother must follow the direction of a medical professional – routine and regularity were emphasised in all the New Zealand publications around child care during this time.90 International experiences were the same. Apple argues that by the second quarter of the twentieth century, letters to women's magazines and child care journals from mothers reflected what women were reading and being told by their doctors rather than what they were personally experiencing.91 The Plunket book produced in the 1940s does not differ substantially from earlier books. The cover still depicts a breastfeeding mother and the book is the same size and colour. The advice offered to the mother is the same. The 1940s was at the height of World War Two and as a result, many fathers were absent from homes. Older children and grandmothers who may have helped with the younger children were often sent to work, and mothers were left alone to raise their infants. Although, New Zealand women had readily become involved in the war effort, the war had mixed blessings for women. Some found employment opportunities that they may not have previously had.92 Others found that not only were they required to work in occupations that were previously considered male but that they were still required to 'keep the home fires burning' so that their men would have a home to return to.⁹³ Organisations such as the Plunket Society also became involved in the war effort. Plunket antenatal clinics, although curtailed by the introduction of five free antenatal check-ups by general practitioners as part of the 1938 Social Security Act, continued to flourish in Auckland offering vital support to mothersto-be.⁹⁴ Plunket also ran a number of lectures on child care for volunteers who may be willing to assist with looking after large numbers of children in the event of an emergency.⁹⁵ The perpetuation of scientific motherhood continued.

Conclusion

From the early books of the 1920s to the books published toward the end of World War II there were few changes. Content throughout the examined period remained much the same, with the rhetoric of scientific motherhood perpetuated by the role of the Plunket nurse and the Plunket book having profound influence on mothers. The idea that adhering to the strict routines of the 'Truby King method' would result in a healthy, live infant, meant that women willingly entered into a relationship with their Plunket nurse and followed the instructions given in their Plunket books. However, this adherence ultimately silenced women's experiential knowledge. The consequence of compliance with strict routines resulted in many women being unable to continue breastfeeding, as milk supply reduced, and also undermined women's abilities to trust their own mothering instincts. In the next article we will examine how the emergence of a women-centric language over the following years challenged notions of scientific mothering, resulting in significant changes in Plunket book content and the practice of Plunket nurses.



Endnotes

- 1 Jill Clendon and Denise Dignam, 'Child Health and Development Record Book: Tool for Relationship Building Between Nurse and Mother', *Journal of Advanced Nursing*, 66, 5, 2010, pp.968-977.
- 2 John Sweeney, 'Historical Research: Examining Documentary Sources', Nurse Researcher, 12, 3, 2005, pp.61-73.
- 3 Ibid., p.62.
- 4 Pamela Wood, 'Understanding and Evaluating Historical Sources in Nursing History Research', *Nursing Praxis in New Zealand, 27,* 1, 2011, pp.25-33.
- 5 Janet Hargreaves, 'The Under-Used Resource of Historical Research', Nurse Researcher, 15, 3, 2008, pp.32-44.
- 6 Anne McMurray and Jill Clendon, Community Health and Wellness: A Socio-Ecological Approach, Sydney, 2011.
- 7 Alan Pearson and Karin Hannes, 'Evidence about Patients' Experiences and Concerns', in: Tammy Hoffmann, Sally Bennett and Chris Del Mar, eds., Evidence Based Practice Across the Health Professions, 2nd edn., Sydney, 2013, pp.221-239.
- 8 Jill Clendon, 'A Social History of the Plunket Book', PhD thesis, Massey University, 2009.
- 9 Gordon Parry, A Fence at the Top: The First 75 Years of the Plunket Society, Dunedin, 1982, p.47.
- 10 Truby King's first 'nurse' was not registered with the Nursing Council of New Zealand but was working as a nurse at the Seacliffe Mental Hospital with Truby King. She was considered 'capable and receptive' (Parry, 1982, p.18) and willing to take part in Truby King's crusade.
- 11 Mary King, Truby King The Man: A Biography by Mary King, London, 1948, p.153.
- 12 The 'Truby King Method' was a specific approach to child rearing that advocated strict techniques of feeding, sleeping and infant behaviour designed to result in a healthy infant and child. Parry, 1982; Stephen Humphries and Pamela Gordon, *A Labour of Love: The Experience of Parenthood in Britain 1900-1950*, London, 1993.
- 13 Linda Bryder, A Voice for Mothers: The Plunket Society and Infant Welfare 1907-2000, Auckland, 2003.
- 14 Hester Maclean, Nursing in New Zealand, Wellington, 1932, pp.93-94; See also Bryder, p.37. for further discussion on this.
- 15 Bryder, A Voice for Mothers: The Plunket Society and Infant Welfare 1907-2000, p.68.
- 16 Ibid., p.68.
- 17 The Royal New Zealand Society for the Health of Women & Children, Hocken Library Archives, Archive number AG7 1-2-1, Literature Central Council Minute Book 1917-1926.
- 18 Ibid.
- 19 The Royal New Zealand Society for the Health of Women & Children, *Report of Central Council and Fifteenth Annual Report of the Dunedin Branch,* Dunedin, 1922, p.16; Hocken Library archive: Archive Number: AG7 1-3-1. Description: Literature Annual Reports of Council.
- 20 The Royal New Zealand Society for the Health of Women & Children, Report of the Central Council and Fifteenth Annual Report of the Dunedin Branch, p.36.
- 21 Ibid., p.16.
- 22 Plunket book PBJW1, 1921, Author's private collection.
- 23 Bryder, A Voice for Mothers: The Plunket Society and Infant Welfare 1907-2000.
- 24 Michel Foucault, 'The Subject and Power', in Hubert Dreyfus and Paul Rabinow, eds., *Michel Foucault: Beyond Structuralism and Hermeneutics*, New York, 1982; Anne Kelly and Anthea Symonds, *The Social Construction of Community Nursing*, London, 2003, pp.208-228.
- 25 Olssen, Erik. 'Truby King and the Plunket Society: An Analysis of a Prescriptive Ideology'. *The New Zealand Journal of History, 15,* 1, 1981, pp.3-23.
- 26 Linda Bryder, 'Perceptions of Plunket: Time to review historians' interpretations', Conference Paper presented at *New Countries* and *Old Medicine: An International Conference on the History of Medicine and Health,* Auckland, 1994.
- 27 Philippa Mein-Smith, 'Mothers, Babies, and the Mothers and Babies Movement: Australia through Depression and War', Social History of Medicine, 6, 1, 1993, pp.51-83.

- 28 Linda Bryder, 'The Plunket Nurse as a New Zealand Icon', 2002, online, available: http://www.nursing.manchester.ac.uk/ukchnm/publications/seminarpapers/ 30 October 2013.
- 29 Rima Apple, 'The Medicalization of Infant Feeding in the United States and New Zealand: Two Countries, One Experience', *Journal of Human Lactation 10, 1, 1994, pp.31-7.*
- 30 Rima Apple, 'Constructing Mothers: Scientific Motherhood in the 19th and 20th Centuries', Social History of Medicine, 8, 2, 1995, pp.161-78.
- 31 Ibid.
- 32 Apple, 'The Medicalization of Infant Feeding in the United States and New Zealand: Two Countries, One Experience'
- 33 See for example advertisements for infant feeding bottles by 'Jonas Harrop, chemist and druggist' in various editions of the Tuapeka Times from 1868 and by 'F. Foster, Pharmaceutical Chemist' in various editions of the Evening Post from 1870. Both accessed 3 February 2014 from http://paperspast.natlib.govt.nz/cgi-bin/paperspast?a=d&cl=search&d=TT18691016.2.32.1&srp os=1&e+-----100-TT-1----2infant+feeding+bottles--
- 34 King, Truby King The Man: A Biography by Mary King.
- 35 Sullivan, Jim, I Was a Plunket Baby: 100 Years of the Royal New Zealand Plunket Society Inc. Auckland, 2007; Bryder, A Voice for Mothers: The Plunket Society and Infant Welfare 1907-2000.
- 36 See for example Truby King, Baby's First Month: Hints to Fathers and Mothers, Wellington, 1913; Truby King, Natural Feeding of Infants, Dunedin, 1917; Truby King, The Story of the Teeth and How to Save Them, Wellington, 1917.
- 37 Apple, 'Constructing Mothers: Scientific Motherhood in the 19th and 20th Centuries'; Bryder, A Voice for Mothers: The Plunket Society and Infant Welfare 1907-2000.
- 38 Plunket book PBJW1, 1921, Author's private collection.
- 39 In areas that were not served by Plunket nurses, public health nurses provided well child services to mothers. It was often mothers in rural and remote areas, low income mothers and Maori and Pacific mothers who were recipients of public health nursing services. Public health nurses provided well child services from around 1953 and continue to provide some well child services to high need families today. Prior to 1953, Native health nurses provided support to Maori mothers and children until the 1930s when the role was combined with school nurses and the nurse became known as the District nurse. This role was then combined with the occupational health nurse to create the public health nurse in 1953 (Alison Garlick, 'Determined to Make a Difference: A Study of Public Health Nursing Practice with Vulnerable Families', MN thesis, Massey University, 2006; A.H. McKegg, "Ministering Angels": The Government Backblock Nursing Service and the Maori Health Nurses, 1909 1939,' Masters thesis, University of Auckland, 1991; Anne McKillop, 'Native Health Nursing in New Zealand 1911-1930: A New Work and a New Profession for Women', Masters thesis, Massey University, 1998).
- 40 Bryder, A Voice for Mothers: The Plunket Society and Infant Welfare 1907-2000, p.92.
- 41 Ibid., p.92.
- 42 Karen McBride-Henry, 'Responding to the Call to Care: Women's Experience of Breastfeeding in New Zealand', PhD thesis, Massey University, 2004; Kathleen Ryan, 'Women's Narratives of Infant Feeding: The Politics of Knowledges and Practices in Post WWII New Zealand', PhD thesis, University of Otago, 1998.
- 43 Parry, A Fence at the Top: The First 75 Years of the Plunket Society, p.13; Philippa Mein-Smith argues that the infant mortality rate had begun declining well before the 'Truby King method' of raising infants became a part of many New Zealand mothers' daily routine despite claims by infant welfare specialists including Truby King that it was changes made as part of the baby health movement (Philippa Mein-Smith, 'Truby King in Australia: A Revisionist View of Reduced Infant Mortality', New Zealand Journal of History, 22, 1, 1988, pp.23-43).
- 44 Plunket book PBJW1, 1921, Author's private collection.
- 45 Ibid.
- 46 Plunket book PBKAH1, 1931, Author's private collection.
- 47 Bryder, A Voice for Mothers: The Plunket Society and Infant Welfare 1907-2000.
- 48 Plunket book PBPW4, 1929, Author's private collection.
- 49 Plunket book PBKAH1, 1931, Author's private collection.
- 50 R.F. Patterson, The University English Dictionary, London, n.d.



- 51 A. Baker, 'Setting the Rules: Pharmaceutical Benefits and the Welfare State,' in Peter Davis, ed., For Health or Profit? Medicine, the Pharmaceutical Industry, and the State in New Zealand, Auckland, 1992, p.19.
- 52 For example, books from 1942 (PBSC1), 1956 (PBRD) and 1984 (PBPW5) all contain directives of varying types. From 1939: 'Has thrush. Clean mouth with glycerine and borax before and after feeds until clear'; from 1942: 'Give baby plenty of boiled water, cough mixture ½ teaspoon every 4 hours after fluids. Mix well: Glycerine, 1 teaspoon, Olive Oil, 2 teaspoons, Orange juice 3 teaspoons.'; From 1956: 'Rash on face. Vaseline to eyebrows twice daily'; From 1984: 'Cord on treat 4hrly with clear meths', Author's private collection.
- 53 Plunket book PBDH1, 1933, Author's private collection.
- 54 Rima Apple, Mothers and Medicine: A Social History of Infant Feeding 1890 1950, Madison, 1987.
- 55 Plunket book PBDH1, 1933, Author's private collection.
- 56 Plunket book PBDH1, 1933, Author's private collection.
- 57 Varying entries from Plunket books PBHN1, 1937 and PBBH1, 1936, Author's private collection.
- 58 Plunket book PBKP1, 1939, Author's private collection.
- 59 F. Davidson, 'Infant Feeding in New Zealand: A Review of Infant Feeding Practices from the 1890s to the Present Day', *Proceedings of the Nutrition Society of New Zealand, 9,* 1984; Philippa Mein-Smith, *Mothers and King Baby: Infant Survival and Welfare in an Imperial World: Australia 1880-1950,* London, 1997.
- 60 Mein-Smith, Mothers and King Baby: Infant Survival and Welfare in an Imperial World: Australia 1880-1950, p.95.
- 61 Plunket book PBVL1, 1939, Author's private collection.
- 62 Plunket book PBVL1, 1939, Author's private collection.
- 63 Plunket book PBCL1, 1937, Author's private collection.
- 64 Plunket book PBSC1, 1942, Author's private collection.
- 65 Many Plunket books included inserts that outlined various food suggestions for infants and young children. See for example Plunket books PBKP1, 1931 and PBVL1, 1938, Author's private collection.
- 66 See for example The Royal New Zealand Society for the Health of Women & Children, 'Hocken Library Archive Ag007-011/054 Records Notebook Containing Recipes for Humanised Milk', and 'Hocken Library Archive: Ag-007-011/062 Helen V Walker's Notebook Containing Recipes and Notes,' Dunedin.
- 67 Apple, Mothers and Medicine: A Social History of Infant Feeding 1890 1950.
- 68 Ryan, 'Women's Narratives of Infant Feeding: The Politics of Knowledges and Practices in Post WWII New Zealand'.
- 69 See for example Plunket books PBCL2, 1941 and PBCL1, 1932, Author's private collection.
- 70 Apple, Mothers and Medicine: A Social History of Infant Feeding 1890 1950.
- 71 Plunket book PBKP1, 1932, Author's private collection.
- 72 See for example Plunket books PBKP1, 1932 and PBDH1, 1933, Author's private collection.
- 73 Plunket book PBDH1, 1933, Author's private collection.
- 74 See for example Plunket books PBBH1, 1936 and PBCL1, 1937, Author's private collection.
- 75 Plunket book PBCL2, 1941, Author's private collection.
- 76 Plunket book PBPW4, 1929, Author's private collection.
- 77 Ibid.
- 78 Plunket book PBHN1, 1937, Author's private collection.
- 79 Philippa Mein-Smith, A Concise History of New Zealand, New York, 2005.
- 80 Mein-Smith, A Concise History of New Zealand; Bryder, A Voice for Mothers: The Plunket Society and Infant Welfare 1907-2000.
- 81 Bryder, A Voice for Mothers: The Plunket Society and Infant Welfare 1907-2000.
- 82 Mein-Smith, A Concise History of New Zealand; Margaret McClure, A Civilised Community: A History of Social Security in_New Zealand 1898-1998, Auckland, 1998.

- 83 Examples of this can be seen in excerpts from the participants in Helen May's 1988 study on postwar women and their daughters (Helen May, 'Postwar Women 1945-1960 and Their Daughters 1970-1985: An Analysis of Continuity, Contradiction, and Change in Two Generations of Pakeha Women as Mothers, Wives, and Workers', PhD Thesis, 1988 and Sue Kedgley's 1996 book on motherhood in New Zealand (Sue Kedgley, *Mum's the Word: The Untold Story of Motherhood_in New Zealand*, Auckland, 1996).
- 84 May, 'Postwar Women 1945-1960 and Their Daughters 1970-1985: An Analysis of Continuity, Contradiction, and Change in Two Generations of Pakeha Women as Mothers, Wives, and Workers'.
- 85 Ibid.
- 86 Plunket book PBVL1, 1938, Author's private collection.
- 87 Mein-Smith, A Concise History of New Zealand; McClure, A Civilised Community: A History of Social Security in New Zealand 1898-1998; Brian Easton, The Nationbuilders, Auckland, 2001.
- 88 McClure, A Civilised Community: A History of Social Security in New Zealand 1898-1998; Mein-Smith, A Concise History of New Zealand.
- 89 Michael King, The Penguin History of New Zealand, Auckland, 2003.
- 90 Mary King's book 'Mothercraft' was the main Plunket publication during this period and was republished approximately every two years from 1934 to 1944 (Mary King, *Mothercraft*, Sydney, 1934-1944).
- 91 Apple, 'Constructing Mothers: Scientific Motherhood in the 19th and 20th Centuries'.
- 92 May, 'Postwar Women 1945-1960 and Their Daughters 1970-1985: An Analysis of Continuity, Contradiction, and Change in Two Generations of Pakeha Women as Mothers, Wives, and Workers'.
- 93 Ihid
- 94 Bryder, A Voice for Mothers: The Plunket Society and Infant Welfare 1907-2000.
- 95 Kedgley, Mum's the Word: The Untold Story of Motherhood in New Zealand.

