

LITERATURE REVIEW

Health Equity Assessment:
Breastfeeding Welcome Here



Interventions to improve equity in breastfeeding & to increase breastfeeding rates for Māori



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Public Health Unit,
Taranaki District Health Board



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This literature review set out to explore interventions which have been found to be effective in improving equity in breastfeeding rates, and interventions have been found to be effective in increasing breastfeeding rates for Māori.

While several systematic reviews identified a complex set of influences on women's decisions to breastfeed or not, much of the research does not consider the voices of those groups within society who are most at risk of not breastfeeding. In general, the reviews recommend that further high-quality research is required.

A growing body of evidence in Aotearoa/New Zealand has explored the perceptions of Māori women and whānau regarding the barriers to breastfeeding. Recommendations have been developed for interventions which may increase breastfeeding rates for Māori mama and pepe, however, further research is required to demonstrate their effectiveness.

As has been identified in several of the papers included in this review, there are three key areas which are likely to reduce inequity in breastfeeding and increase rates of Māori breastfeeding:

Improving the responsiveness of health systems

Enacting legislation and policy in workplaces and hospitals to reduce inequity in breastfeeding

Empowering community and whānau to support breastfeeding.

This literature review has been compiled to compliment the Health Equity Assessment of the Breastfeeding Welcome Here (BFWH) Project undertaken by the Taranaki District Health Board's (TDHB) Public Health Unit (PHU).

The purpose of the Health Equity Assessment was to assess the impact of the BFWH Project on inequity in breastfeeding rates in Taranaki, and to identify interventions that could contribute to improving equity in breastfeeding in Taranaki.

The BFWH Project aims to increase support and advocacy for breastfeeding in the community through accreditation of family friendly environments such as cafes, libraries, swimming pools, museums, medical centres and other public spaces. The goal of the programme is to enable women to feel comfortable breastfeeding in a variety of community settings.

In high-income countries, such as Aotearoa/New Zealand, more highly educated and better-off women are more likely to commence breastfeeding than those from lower socio-economic groups (Balogun et. al. 2016). Within families, the practices and experience of female relatives is influential on both the initiation and duration of breastfeeding (Rollins et. al. 2006). The attitudes and preferences of fathers can also affect breastfeeding.

Inequity exists in breastfeeding rates in Taranaki; with lower rates of breastfeeding for Māori babies compared with Non-Māori (41.3 per cent fully or exclusively breastfed at 3 months compared with 59.2 per cent), and lower rates of breastfeeding in South Taranaki than in North Taranaki. Infants discharged from Hawera Hospital are three times more likely to be receiving breast milk substitutes on discharge compared to those infants discharged from Base Hospital.

This literature review will examine New Zealand and international studies published in the past ten years, exploring interventions which have been found to be effective in improving equity in breastfeeding rates, and interventions that have been found to be effective in increasing breastfeeding rates for Māori.

Sources of evidence

The literature review process involved the development of two focused questions:

- 1) Which interventions have been found to be effective in improving equity in breastfeeding rates?
- 2) Which interventions have been found to be effective in increasing breastfeeding rates for Māori?

These questions guided terms used to search the Cochrane Reviews and EBSCO Databases (Table 1). From the search results, articles were selected if they had a focus on support and/or education and/or initiation of breastfeeding. Those which were focused on clinical outcomes were not included.

In addition, relevant articles relating to Māori breastfeeding and regional strategies were sourced from colleagues working in public health, including theses on the topic. This resulted in a total of 12 articles being considered in this literature review, including four systematic reviews; a NZ cross-cultural qualitative study; a qualitative study of Māori breastfeeding outcomes; a kaupapa Māori breastfeeding project report; and two Masters Theses on breastfeeding for Māori women.

Table 1. Search outline

COCHRANE LIBRARY			
SEARCH	TERMS	LIMITS	HITS
1	breastfeed		24; 4 selected
EBSCO (CINAHL Complete; MEDLINE Complete)			
SEARCH	TERMS	LIMITS	HITS
1	breastfeed*	2012-2017; English	12,329
2	Māori	2012-2017; English	1774
3	1 AND 2		13; 4 selected
4	*equit*	2012-2017; English	12,204
5	1 AND 4	2012-2017; English	61; 1 selected

Interventions that have been found to be effective in improving equity in breastfeeding rates

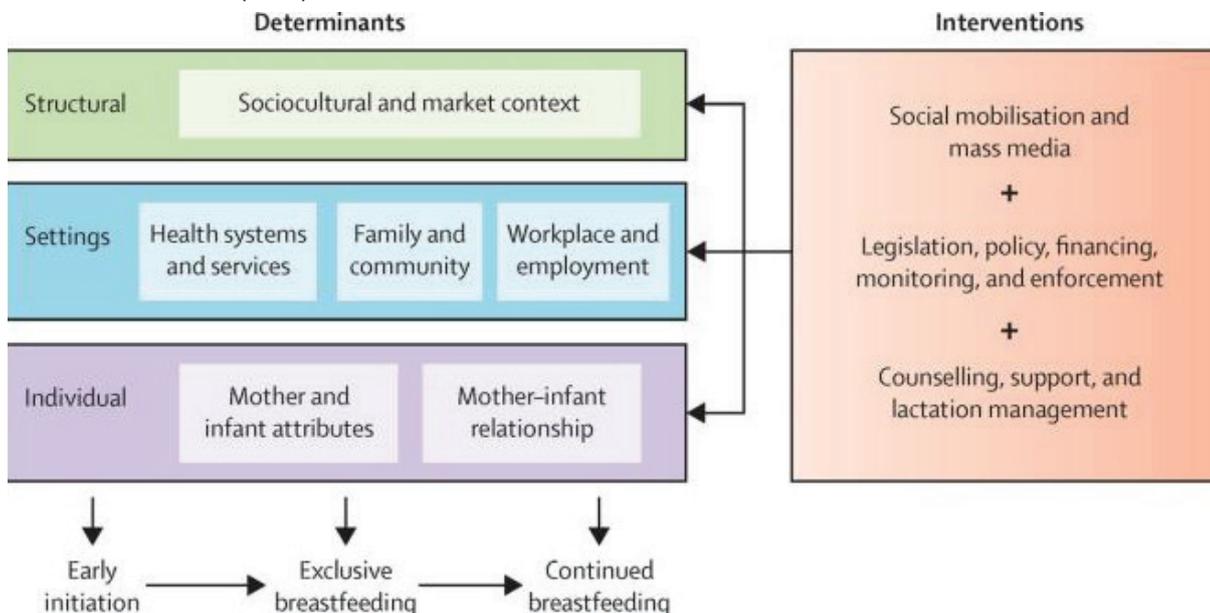
1. Structural determinants of health

“Infant feeding is strongly related to inequalities in health, and, far from being an individual decision made by each woman, is influenced most strongly by structural determinants of health” (McFadden et. al., 2017). Breastfeeding initiation rates remain relatively low in many high-income countries, particularly among women in lower-income groups (Balogun et. al., 2016).

Rollins et. al. (2016) completed a systematic review to identify the determinants of breastfeeding. As a result of the review, the authors recommended that the complex influences on breastfeeding require a complex response of supportive measures at many levels including legal and policy directives, influencing social attitudes and values, improving women’s work and employment conditions, and the provision of healthcare services which are responsive to enabling women to breastfeed. A conceptual model was developed which illustrates the determinants which affect breastfeeding decision and behaviours are operating at many different levels (Figure 1).

Figure 1. The components of an enabling environment for breastfeeding - a conceptual model

Source: Rollins et. al. (2016)



2. Support to mothers

A Cochrane review of support for healthy breastfeeding mothers with healthy term babies published in 2017 (McFadden et. al.) found that when breastfeeding support is offered to women, the duration and exclusivity of breastfeeding is increased. A key aspect of effective breastfeeding support services was that they were tailored to the setting and the needs of the population group, illustrating the importance of ascertaining the needs of women from those groups experiencing inequity before services are designed. Support was likely to be more effective in settings with high initiation rates, therefore strategies to encourage breastfeeding initiation are still deemed important.

A further Cochrane review published in 2016 (Balogun et. al.) analysed 28 randomised control trials involving 107,362 women in seven countries. They found low-quality evidence that healthcare professional-led breastfeeding education and non-healthcare professional-led counselling and peer support interventions can result in some improvements in the number of women beginning to breastfeed. There was too little evidence to support whether multimedia education, early mother-infant contact, or community-based breastfeeding groups increased breastfeeding initiation. The authors noted that high-quality research is needed to understand which interventions are likely to be effective in different population groups.

3. Identifying the needs of those less-likely to breastfeed

The need to ascertain the voice of those groups within society who are most at risk of not breastfeeding is also reiterated by Reinfelds (2015) who states that, while important, legislation, policy and government strategies “cannot be fully effective if they are developed and implemented without consideration of the needs and expectations of those groups within society who are most at risk of not breastfeeding to the recommendations”.

4. Supporting breastfeeding women at work

The increasing numbers of women in the workforce highlights the need for breastfeeding breaks and on-site spaces for breastfeeding and/or expressing breast milk. Returning to work has been shown to have negative effects on breastfeeding with women planning to return to work after childbirth less likely to begin or continue breastfeeding (Rollins et. al. 2016). For those in lower socioeconomic groups, including proportionately more Māori, there may be financial pressures to return to work (Glover & Cunningham 2011). Increasing paid parental leave, and enabling workplaces and public spaces to be more supportive of breastfeeding are important influences on women’s decisions to breastfeed (Hayes Edwards 2014, Reinfelds 2015).

Interventions which may be effective in increasing breastfeeding rates for Māori

In recent years, a growing body of evidence has explored the perceptions of Māori women and whānau regarding the barriers to breastfeeding. Recommendations have been developed for interventions which may increase breastfeeding rates for Māori, however, there has not been sufficient research completed to demonstrate their effectiveness.

1. Promotion of breastfeeding to Māori as re-establishing tikanga

Glover et. al (2008) undertook research with 59 Māori women throughout the North Island. A key finding was a strong intent to breastfeed amongst the participants (Women who didn’t want to breastfeed and women who gave their babies breast-milk substitutes were under-represented in the research). A recommendation was made to promote breastfeeding to Māori women and whānau as “re-establishing breastfeeding as a tikanga (right cultural practice), rather than as a lifestyle choice”.

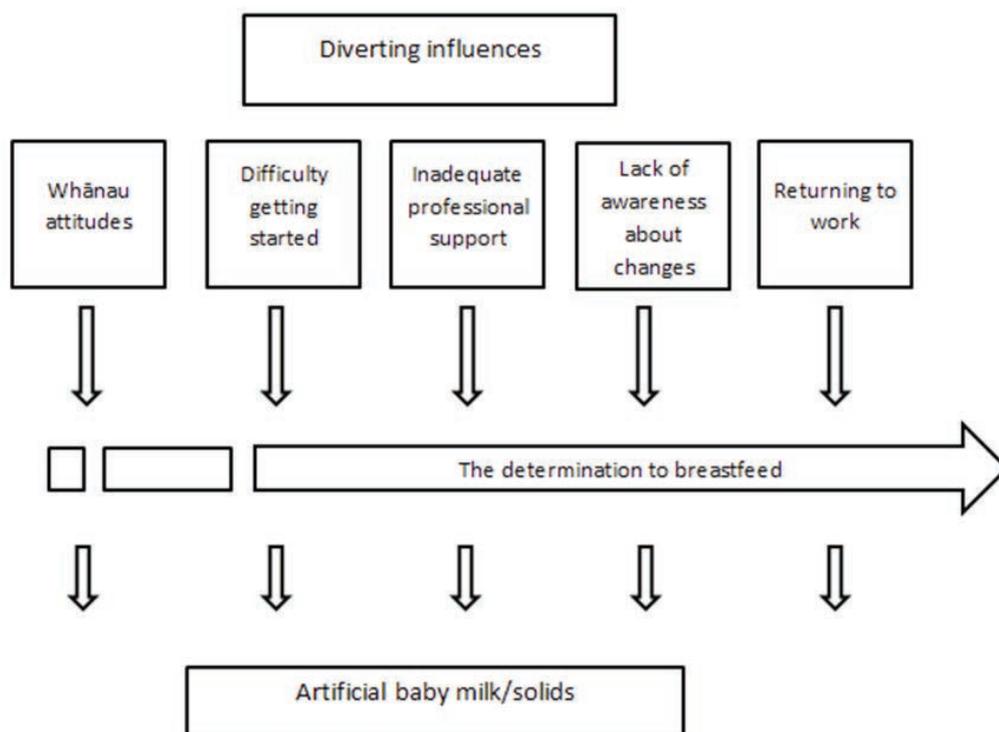
Further analysis of the data by Glover et. al. (2009) found that the determination and desire of Māori women to breastfeed was impacted by the lack of appropriate support at critical time points and a lack of culturally relevant information, due to health services being ill-equipped to meet their needs and expectations. From this study the Te Reo o Aratika model, which shows the five key influences diverting wahine away from breastfeeding was developed (Figure 2.)

2. Culturally relevant health services

He Korowai Oranga states that “services should also be organised around the needs of Māori consumers and their whānau rather than the needs of providers” (Ministry of Health, 2014). This includes the use of Kaupapa Māori programme frameworks, and delivery of services in environments such as marae and at times that are suitable for whānau (Glover & Cunningham 2011).

Figure 2. Te Reo o te Aratika model of breastfeeding

Source: Glover et. al. (2008)



Abel et. al (2001) found a need for Western health service providers to acknowledge and support the expertise of Pacific and Māori female relatives in infant care, and to be more inclusive of extended family in maternity care and infant care advice. Ratima and Crengle (2013) also highlight the importance for health professionals to deliver information appropriately - a review of maternity services found that Māori women indicated a preference for Māori midwives, as they wanted to be sure that their care would be responsive to their cultural needs.

While there is no conclusive evidence to support breastfeeding education as a strategy for increasing the initiation and duration of breastfeeding (Lumbiganon et. al. 2016), research by Glover et. al. (2008, 2009) indicates that services which provide education and advice based on Māori belief systems are more likely to encourage breastfeeding by Māori wahine. This is also supported by the findings of the *Kia Mau, Kia Ū* research where participants expressed a desire for breastfeeding education to take a broader approach, utilising a variety of communication methods and incorporating innovative methods for promoting breastfeeding to Māori, including making connections to ancestors (Reinfelds, 2015).

In reference to Ministry of Health research on health literacy (*Kōrero Mārama*), Ratima and Crengle (2013) note that communication problems were particularly reported by Māori when the provider was non-Māori. Because of a perceived lack of empathy by the provider, Māori women were reluctant to seek clarification when required.

A key consideration in providing culturally relevant health services for Māori wahine is the population demographic - fewer older Māori women are having babies, while first time Māori mothers are significantly younger than non-Māori mothers (Glover & Cunningham, 2011). Abel et al. (2001) found that older Māori mothers tended to be living as nuclear families, attended antenatal classes, and sought professional support. Amongst Māori, therefore, breastfeeding support and advice should be targeted towards younger women (median age of 25 years), compared to non- Māori (median age 29 years).

This is also supported by the findings of Reinfelds (2015) where wahine under 30 were less committed to breastfeeding (tending to say they would breastfeed if they could) and peer-support was acknowledged as being particularly important for supporting the younger women to breastfeed.

Hayes Edwards (2014) investigated the interactions which enabled eight Māori women in the Eastern Bay of Plenty to

achieve optimal breastfeeding through the basic social process of ūkaipōtanga (nurturing). Ūkaipōtanga is described as a process of unity between a wahine, her partner, whānau, and health professionals (predominantly midwives). When this process works well, the whole whānau benefits since the art or skill of breastfeeding, once gained, can be shared with others. Reinfelds (2015) also reports that for many of the participants in the *Kia Mau, Kia Ū* research having a breastfeeding role model or tuakana was a significant positive influence on their decision to breastfeed.

Having a midwife who engaged culturally, involved the partner and whānau, was available and offered alternatives practices and quality care were some of the key properties identified for successful ūkaipōtanga. In summary, Hayes Edwards (2014) makes recommendations of strategies to assist Māori women to achieve “optimal breastfeeding”. These include:

1. Promote and deliver accessible and regular antenatal and breastfeeding antenatal programmes within a Kaupapa Māori framework, specifically tailored to first-time parents, as well as specific programmes for pregnant teenage wahine and their partners
2. Consider policies and strategies to encourage attendance at antenatal classes for first-time parents, such as leave provision by workplaces
3. Establish specialist midwife teams for first-time parents
4. Better collaboration between midwives and other services both ante- and post-natally, for example having Kaupapa Māori midwifery services and Well Child/Tamariki Ora service within iwi service providers; midwives introducing clients to Kaupapa Māori antenatal class facilitators; Tamariki Ora providers funded to commence contact during the pre-natal period
5. Revisit midwives client quota restrictions in high need regions to provide better quality care, including home visits for wahine Māori
6. Provide Kaupapa Māori awareness training for midwives
7. Recruit and retain Māori into midwifery practice
8. Encourage first-time mothers to remain in hospital until breastfeeding is established (min. five days)
9. Hospital policies to allow for wet-nursing
10. Increase paid parental leave provision to six months to enable continued breastfeeding to WHO guidelines
11. Change Breastfeeding in the Workplace policies to allow for paid breastfeeding breaks. (Current legislation allows for unpaid breastfeeding breaks.)

3. Addressing smoking rates

Amongst women, Māori women have the highest smoking prevalence of current smoking at 40% (Ministry of Health, 2016). Tobacco smoking is a significant barrier to breastfeeding for Māori women, with women reporting ceasing breastfeeding so as not to expose their infant to tobacco smoke (Glover & Cunningham, 2011). Tobacco smoking is also more likely to result in premature birth, intrauterine growth retardation and lower birth weight – all conditions which have a negative impact on the likelihood of successful breastfeeding.

Whilst stopping smoking is very important to improve health, women who smoke during their pregnancy, or take-up smoking again once their baby is born, should be advised that it is best to continue breastfeeding, regardless of their smoking status (Glover & Cunningham, 2011).

To increase the duration of exclusive breastfeeding for amongst Māori women, it is recommended that a focus be put on smoking cessation for pregnant Māori women (Glover et. al., 2009).

This literature review set out to explore interventions which have been found to be effective in improving equity in breastfeeding rates, and interventions have been found to be effective in increasing breastfeeding rates for Māori.

Several systematic reviews identified a complex set of influences on women's decisions to breastfeed or not (McFadden et. al. 2017, Balogun et. al. 2016, Rollins et. al. 2016), however, a key component missing from much of the research is the inclusion of the voices of those groups within society who are most at risk of not breastfeeding. In general, the reviews recommend that further high-quality research is required.

In recent years, a growing body of evidence in Aotearoa/New Zealand has explored the perceptions of Māori women and whānau regarding the barriers to breastfeeding. Recommendations have been developed for interventions which may increase breastfeeding rates for Māori mama and pepe. However, there has not been sufficient research completed to demonstrate their effectiveness. As part of funding of any of the recommended interventions, therefore, provision should be made to enable quality Kaupapa Māori evaluation to occur.

As has been identified in several of the papers included in this review, there are three key areas which are likely to reduce inequity in breastfeeding and increase rates of Māori breastfeeding:

1. health systems
2. legislation and policy, and
3. community and whānau.

Health systems need to adapt to be more responsive to the needs of women from those groups experiencing inequity. This means making a genuine commitment to 'patient-centred care' (defined as "providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions") (Health Navigator).

A key aspect of effective breastfeeding support services is that they are tailored to the setting and the needs of the population group, illustrating the importance of quality needs assessment with women from those groups experiencing inequity before services are designed.

Service developers should also consider incorporating innovative methods for promoting breastfeeding, particularly to Māori and younger parents. A key finding of research with Māori women is the recommendation to promote breastfeeding to Māori women and whānau as "re-establishing breastfeeding as a tikanga (right cultural practice), rather than as a lifestyle choice". This requires culturally relevant health services, where professionals deliver information appropriately and are more cognisant of the role of whānau in maternity care and infant care advice. In addition, Kaupapa Māori awareness training should be provided to all those working in the sector.

While there is no conclusive evidence to support breastfeeding education as a strategy for increasing the initiation and duration of breastfeeding, it seems likely that services which provide education and advice based on Māori belief systems are more likely to encourage breastfeeding by Māori wahine.

Better collaboration between professionals providing antenatal, postnatal and Well Child/Tamariki Ora services in order to facilitate positive relationships with clients is required.

A key consideration in increasing breastfeeding rates for Māori is the need to develop inclusive services which also provide effective quit smoking support to pregnant women and ongoing support following birth to breastfeed and, ideally, remain smoke-free.

Legislation & Policy

There are a number of settings where effective policy may be enacted to reduce inequity in breastfeeding.

Women in lower socioeconomic groups, including proportionately more Māori, are more likely to need to return to work due to financial pressures. To reduce inequities in breastfeeding and increase Māori breastfeeding rates, supportive workplace policies such as increasing paid parental leave provision to six months (to enable continued exclusive breastfeeding to WHO guidelines), breastfeeding-friendly spaces in the workplace and paid breastfeeding breaks should be enacted.

Other policy interventions which have been recommended for consideration in the research are:

1. Leave provision by workplaces to encourage attendance at antenatal classes for first-time parents, and
2. Hospital policies which allow for wet-nursing.

Community and Whānau

"Success in breastfeeding is not the sole responsibility of a woman—the promotion of breastfeeding is a collective societal responsibility."²

Within families, the practices and experience of female relatives is known to affect the initiation and duration of breastfeeding. Therefore, it is important to create unity between a woman, her partner, whānau, and health professionals (predominantly midwives) to support breastfeeding.

For Māori, re-establishing breastfeeding as a tikanga, with the whānau as an integral support, is considered essential to increase breastfeeding rates.

- Abel S, Park J, Tipene-Leach D, Finau S & Lennan M. (2001) Infant care practices in New Zealand: a cross-cultural qualitative study. *Social Science & Medicine* 53 (2001) 1135–1148.
- Balogun OO, O’Sullivan EJ, McFadden A, Ota E, Gavine A, Garner CD, Renfrew MJ & MacGillivray S. (2016). Interventions for promoting the initiation of breastfeeding. *Cochrane Database of Systematic Reviews* 2016
- Glover M, Manaena-Biddle H, Waldon J, & Cunningham C. (2008) *Te Whaangai Uu, Te Reo O Te Aratika: Māori Women and Breastfeeding*. Auckland: University of Auckland, Social & Community Health.
- Glover M, Waldon J, Manaena-Biddle H, Holdaway M & Cunningham, C. (2009) Barriers to best outcomes in breastfeeding for Māori: mothers’ perceptions, whānau perceptions, and services. *Journal of human lactation* 25(3). DOI: 10.1177/0890334409332436
- Glover, M. & Cunningham, C. (2011) Hoki ki te ukaipo: Reinstating Māori infant care practices to increase breastfeeding rates. *Infant Feeding Practices* (247).
- Hayes-Edwards, Isabel Tui Rangipohutu. (2014). *Ūkaipōtanga: A grounded theory on optimising breastfeeding for Māori women and their whānau*. (Masters of Public Health), Auckland University of Technology, Auckland.
- Health Navigator New Zealand. Patient and person-centred care. Retrieved 26th April 2017 from <https://www.healthnavigator.org.nz/clinicians/p/patient-centred-care/>
- Lumbiganon P, Martis R, Laopaiboon M, Festin MR, Ho JJ & Hakimi M. Antenatal breastfeeding education for increasing breastfeeding duration. *Cochrane Database of Systematic Reviews* 2016, Issue 12. Art. No.: CD006425. DOI: 10.1002/14651858.CD006425.pub4.
- McFadden A, Gavine A, Renfrew MJ, Wade A, Buchanan P, Taylor JL, Veitch E, Rennie AM, Crowther SA, Neiman S, MacGillivray S. Support for healthy breastfeeding mothers with healthy term babies. *Cochrane Database of Systematic Reviews* 2017, Issue 2. Art. No.: CD001141. DOI: 10.1002/14651858.CD001141.pub5.
- Ministry of Health (2014). *The Guide to He Korowai Oranga: Māori Health Strategy 2014*. Wellington: Ministry of Health.
- Ministry of Health. 2016. *Annual Update of Key Results 2015/16: New Zealand Health Survey*. Wellington: Ministry of Health.
- Ratima, M, & Crengle, S. (2013). Antenatal, labour, and delivery care for Māori: Experiences, location within a lifecourse approach, and knowledge gaps. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health*, 10(3), 353-366.
- Reinfelds, MA. (2015) *Kia mau, kia ū: supporting the breastfeeding journey of Māori women and their whānau in Taranaki: a Thesis Presented in Fulfilment of the Requirements for the Degree of Masters in Public Health at Massey University, Wellington, New Zealand*
- Rollins NC, Bhandari N, Hajeerhoy N, Horton S, Lutter CK, Martines JC, ...Victora CG. (2016). Why invest, and what it will take to improve breastfeeding practices? *The Lancet*, 387(10017), 491-504. DOI: 10.1016/S0140-6736(15)01044-2.
- Stevenson, S. (2017) *Midland Breastfeeding framework (draft)*. Midland Maternity Action Group.