EtD 47. Should mana-enhancing tikanga practices be incorporated to support whānau Māori breastfeeding?

POPULATION:	Preterm infants
INTERVENTION:	Mana enhancing tikanga practices that support whānau Māori breastfeeding
COMPARISON:	Standard care
MAIN OUTCOMES:	**Critical outcomes** Upholding tikanga Māori Breastmilk supply/volume Fully breastfed or breastmilk feeding at hospital discharge and/or at 6 months post-partum **Important but not critical** Time to full enteral feeds Time to full sucking feeds Faltering growth/body composition Cost: cost of intervention, cost of neonatal care and life-long cost **Less important for decision making** Adverse effects Necrotising enterocolitis Mortality Neurodevelopmental impairment Sepsis: proven or suspected Bronchopulmonary dysplasia Retinopathy of prematurity Anaemia of prematurity
SETTING:	Neonatal care
PERSPECTIVE:	Clinical guideline recommendation. Patient perspective
BACKGROUND:	Breastmilk is the optimal source of nutrition for pēpi, providing essential nutrients, immune protection and developmental benefits. Exclusive breastfeeding is recommended for the first six months of a pēpi's life. Statistics show a high rate of breastfeeding in pēpi Māori at discharge from hospital. However, the rates of breastfeeding subsequently decrease, and the rate of breastfeeding at five months postpartum is lower in pēpi Māori than in other infants. Yet, breastfeeding is considered a tikanga (correct cultural practice) and a tika tūāpapa (a fundamental right) in te ao Māori. This discrepancy suggests barriers to ongoing breastfeeding after discharge. Understanding those barriers, identifying mana-enhancing practices and implementing effective breastfeeding strategies tailored to whānau Māori are all necessary steps in addressing this equity gap. Mana enhancing practices involve enhancing the mana of all those involved particularly mama and pēpi. We are all connected at a fundamental level so to enhance the mana of others enhances your own. Empowerment, tino rangatiratanga and effective communication practices are critical in ensuring the mana of the whanau.

CONFLICT OF INTERESTS:	The following co-author for Harris, S *et al* (reference 8) is on the Guideline Development Group: Frank Bloomfield

Assessment

Desirable Effects

How substantial are the desirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Trivial ○ Small ● Moderate ○ Large ○ Varies ○ Don't know	The evidence was based on six qualitative publications [1-6], newborn infants. There were no studies specifically about preterm pēpi Māori. The mana-enhancing tikanga practices that were identified included: The promotion of breastfeeding as a tikanga Māori (correct way of doing things from a Māori perspective) rather than a perceived lifestyle choice was critical and the relationship was seen as being important in developing this as a 'norm'. The normalisation of breastfeeding within whānau members, including tāne Māori, provided wāhine Māori with encouragement and support. The influence of and involvement of maternal grandmothers and sisters played an important role in supporting breastfeeding, especially when they had breastfed their own pēpi Māori. Identification of breastfeeding as an enjoyable experience that could be associated with intimacy and closeness with the pēpi Māori. A need for positive and sufficient maternity support to promote breastfeeding through antenatal and postnatal education. The prevention or minimisation of interruptions in establishing breastfeeding through physical separations (e.g. admission to neonatal intensive care) or physical factors such as sore/cracked nipples or discomfort through engorgement. Wāhine Māori found a lot of support from linking to breastfeeding support networks. Improvements in knowledge about breastfeeding, such as latching and positioning, as well as how breastfeeding changes over time (e.g. some wāhine Māori switched to infant formula at 4 months as they thought their milk wasn't sufficient anymore) Emotional and informational support was perceived as being of higher importance than instrumental support. In Bennett et al, of the 1,060 pēpi Māori who were breastfed at discharge, 12% were still exclusively breastfed at six or more months [1]. Using the Te Anga o	**Proportion of Māori in included studies:** [1] 100% [4] 100% [5] 100% [6] 0.5% [3] Born in Aotearoa New Zealand 11.2%; born in Australia 0.3% [2,7] 10% Definitions of breastfeeding: **Exclusive breastfeeding:** The infant has never, to the mother's knowledge, had any water, formula or other liquid or solid food. Only breastmilk, from the breast or expressed, and prescribed medicines have been given from birth. **Fully breastfeeding:** The infant has taken breastmilk only, no other liquids or solids except a minimal amount of water or prescribed medicines, in the past 48 hours. Manhire *et al* extracted information obtained from a RCT that compared the risks and benefits of a wahakura and a bassinet [6]. In the questionnaires administered during pregnancy and at one, three and six months postpartum, several questions related to breastfeeding. Manhire *et al* pooled the data from both groups and reported on predictors of extended breastfeeding duration: Strong support from the mother's partner (OR 3.64, 95% CI 1.76, 7.55) or mother for breastfeeding (OR 2.47, 95% CI 1.27, 4.82) Older age (OR 1.07, 95% CI 1.02, 1.12).

	ngā Horopaki Māori* model, several variables were identified as statistically significant positive influencers for continued exclusive breastfeeding: In domain **Mahi Arataki** (Policy and Strategy): wāhine Māori were more likely to exclusively breastfeed for six-or- more months if they had thought, antenatally, that it was best to breastfeed for longer than six months (aOR 1.94, 95% CI 1.05–3.78). The authors concluded that breastfeeding promotion should start early in the pregnancy and include mothers, whānau Māori and health professionals. The dissemination of breastfeeding information antenatally, in a culturally safe and accessible way would help support whānau ora (family health and development) and ongoing breastfeeding post-discharge. Also in domain **Mahi Arataki** (Policy and Strategy), wāhine Māori who thought breastfeeding would not be limited by their return to work (aOR 2.17, 95% CI 1.17–4.24) or who thought it would "maybe" be limited (aOR 4.25, 95% CI 1.86–9.85) by their return to work were more likely to continue exclusively breastfeeding by six month compared to wāhine Māori who responded "yes, breastfeeding duration will be limited by return to work". The study was conducted before the extension of paid parental leave from 13 weeks to 26 weeks, and before the broadening of inclusion criteria (e.g. some casual workers). While this extension may have positively influenced the above variable, it was noted by the authors that many wāhine Māori are still not eligible for paid parental leave - a change in policy ensuring universal paid parental leave may positively impact breastfeeding rates. In domain **Whanaungatanga** (Family and Home), multiparous Māori mothers were more likely to exclusively breastfeed for six-or-more months compared to primiparous Māori mothers (aOR 2.55, 95% CI 1.35–5.06). First time Māori mothers may benefit from additional breastfeeding support from whānau, community and healthcare providers. * Te Anga o ngā Horopaki Māori is a contemporary Māori model of health and wellbeing developed by Māori researchers specifically for the *Growing Up in New Zealand* Māori cohort, comprising of six domains. A lack of face-to-face support (especially during the COVID-19 pandemic) was associated with decreased confidence in breastfeeding. A lack of information, education and ongoing at-home lactation support during the first six weeks of the pēpi Māori decreased breastfeeding. Primiparity significantly reduced breastfeeding self-efficacy, i.e. their perceived ability to breastfeed. This population was more likely than multiparous wāhine Māori to have stopped breastfeeding in the first	

	six weeks post-partum and may require additional support. A lack of whanau support and encouragement to bottle-feed decreased breastfeeding.	

Undesirable Effects

How substantial are the undesirable anticipated effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
● Trivial ○ Small ○ Moderate ○ Large ○ Varies ○ Don't know	Using the Te Anga o ngā Horopaki Māori model, Bennett *et al* identified several variables as statically significant negative influencers for continued exclusive breastfeeding [1]: In domain **Te Ao Māori** (Cultural identity): wāhine Māori who rated maintaining cultural traditions and practices as “fairly important” were less likely to exclusively breastfeed for six-or-more months, compared with women who rated these as “very important” (aOR 0.53, 95% CI 0.27–0.99). Yet, wāhine Māori who answered ''not very/not at all important'' (aOR 1.20, 95% CI 0.55-2.51) or ''somewhat important'' (aOR 1.00, 95% CI 0.51-1.91) were not less likely to exclusively breastfeed for six-or-more months compared to participants who answered ''very important''. Although breastfeeding is a fundamental aspect of tikanga, the evidence regarding the influence of cultural traditions and practices on breastfeeding is conflicted. It remains that, for many, access to te ao Māori is limited by the legacy of colonisation, poverty, and systemic racism. In domain **Hauora** (Health and Wellbeing), wāhine Māori who experienced depression during pregnancy (aOR 0.47, 95% CI 0.20–0.99) were less likely to exclusively breastfeed for six-or-more months than those without depressive symptoms. Routine perinatal depression screening in a culturally safe and appropriate setting is necessary. Where needed, screening must be followed by provision of culturally sensitive mental health support. No screening tool validated in a Māori perinatal population was identified in our evidence search. The Hua Oranga questionnaire, which focuses on various aspect of wellbeing, could be considered as an alternative. Also, in domain **Hauora** (Health and Wellbeing), wāhine Māori who remained	In (6), non-Māori breastfed their infants for longer than Māori (OR 2.22; 95% CI 1.17, 4.21). The sample was 70% Māori. The predictors (for all ethnicities) of reduced breastfeeding duration were: Pacifier use (OR 0.28, 95% CI 0.17, 0.46), Daily cigarette smoking (OR 0.51, 95% CI 0.37, 0.69), Alcohol use (OR 0.54, 95% CI 0.31, 0.93) Living in a deprived area (OR 0.40, 95% CI 0.22, 0.72).

	undecided about their child's infant immunisations were more likely to exclusively breastfeed for six or more months than mothers who had decided about immunisation (aOR 3.16, 95% CI 1.55– 6.39). While this variable was associated with increased breastfeeding rates, low infant immunisation rates is a public health issue. This variable further highlights the interconnectedness of the domains of health as well as the broad impact wariness towards healthcare providers and institutions may have.	

Certainty of evidence

What is the overall certainty of the evidence of effects?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Very low ● Low ○ Moderate ○ High ○ No included studies	The overall certainty of evidence is low because the evidence is indirect and the quantitative evidence from the studies by (Bennett et al., 2022) (Manhire et al., 2018) was downgraded to very low but the qualitative evidence was of moderate certainty. The evidence was indirect to the PICO: no study focused on tikanga practice that support Māori breastfeeding in the context of NICU/preterm birth. However, rich qualitative evidence was available on the experience of whanau Māori breastfeeding in the general population. Two studies [1,6] provided statistical analysis of factors associated with longer duration of breastfeeding, based on interviews or questionnaires. The evidence started at a low level of certainty: - the study by Bennett, gathered data from the cohort study Growing Up in New Zealand - the study by Manhire was a secondary analysis of data from a RCT comparing the use of a wahakura to a bassinet. Data was gathered through questionnaires and Manhire pooled the data from both arms regarding breastfeeding: the study was therefore not considered a RCT but an observational study. The evidence was further downgraded to very low certainty due to: - serious risk of bias (recall bias). In the study by Bennett et al, the OR were adjusted for the age of food introduction, which may slightly mitigate the risk of bias- for some outcomes, serious imprecision (low number of participants) - for some outcomes, wide confidence intervals - for some outcomes, the confidence intervals almost reached the null (0.99).	* CASP criteria: 1. Was there a clear statement of the aims of the research? 2. Is a qualitative methodology appropriate? 3. Was the research design appropriate to address the aims of the research? 4. Was the recruitment strategy appropriate to the aims of the research? 5. Was the data collected in a way that addressed the research issue? 6. Has the relationship between researcher and participants been adequately considered? 7. Have ethical issues been taken into consideration? 8. Was the data analysis sufficiently rigorous? 9. Is there a clear statement of findings? 10. How valuable is the research? CASP critical score: a) Criterion is completely met = 2; b) criterion is partially met = 1; c) criterion not applicable, not met, or not mentioned = 0; Total score 20 = high quality; 16–19 moderate quality; ≤ 15 low quality

	The Critical Appraisal Skills Programme (CASP) checklist* for qualitative studies was used to assess the quality of the studies conducting interviews/focus groups. Overall, the studies scored high on the checklist, and the evidence was of moderate quality. Results of the CASP checklist were as follow: Alianmoghaddam *et al*., 2017: 19/20 (moderate quality) [criterion relationship between researcher and participants not met] Glover *et al*., 2007: 18/20 (moderate quality) [criterion relationship between researcher and participants not met] Glover *et al*., 2009: 16/20 (moderate quality) [criterion research design and criterion data collection partially met, criterion relationship between researcher and participants not met]	

Values

Is there important uncertainty about or variability in how much people value the main outcomes?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Important uncertainty or variability ● Possibly important uncertainty or variability ○ Probably no important uncertainty or variability ○ No important uncertainty or variability	Within te ao Māori, breastfeeding is tika tūāpapa (a fundamental right). This tikanga has been impacted by colonialism. The included qualitative studies on Māori breastfeeding report that most participants value breastfeeding and believe that it improves the pēpi health, mother's wellbeing and helps with mother-child bonding. When supported by their whānau and by healthcare providers (in the form of breastfeeding information in the antenatal and postnatal phase), wāhine Māori favoured prolonged exclusive breastfeeding. Factors that prevented breastfeeding to 6 months or more were mostly modifiable, external factors (e.g. lack of information, lack of support, work-related, belief that breastfeeding in public is not acceptable/legal).	Harris et al conducted a survey (n= 496) of parents and healthcare practitioners on the use of breastmilk donation in New Zealand [8]. While Harris' study is not representative of a Māori population specifically (the study included 7.6% Māori), it gives evidence of parents' preferences for human breastmilk, when given the option. In the study cohort, 59.3% of pēpi were exclusively fed mother's milk for the first six months of their life, and 17.3% were fed both mother's milk and donated breastmilk. Mother's milk combined with infant formula only came third (11.3%).

Balance of effects

Does the balance between desirable and undesirable effects favour the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Favours the comparison ● Probably favours	Evidence (mainly qualitative and from broader Māori populations) suggests tikanga-aligned practices support breastfeeding, strengthen whānau involvement and improve cultural safety. No major harms were identified,	

the comparison ○ Does not favour either the intervention or the comparison ○ Probably favours the intervention ○ Favours the intervention ○ Varies ○ Don't know	but the effectiveness in preterm infants is uncertain. In the two studies that provided statistical data [1,6], factors associated with increased duration of breastfeeding were reported but specific interventions were not tested.	

Resources required

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Large costs ● Moderate costs ○ Negligible costs and savings ○ Moderate savings ○ Large savings ○ Varies ○ Don't know	Cultural training of staff is required for healthcare providers to better understand te ao Māori, to ensure whānau-centred care and to improve the quality of interactions and information delivery with whānau Māori. Ongoing quality assessments and improvement programmes (e.g. Plan-Do-Study-Act [PDSA] cycles) involving champions of Māori-centred care may be necessary to improve outcomes and increase equity.	There is also a cost for not implementing the intervention.

Certainty of evidence of required resources

What is the certainty of the evidence of resource requirements (costs)?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Very low ○ Low ○ Moderate ○ High ● No included studies	No included studies	

Cost effectiveness

Does the cost-effectiveness of the intervention favour the intervention or the comparison?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Favours the comparison ○ Probably favours the comparison ○ Does not favour either the intervention or the comparison ○ Probably favours the intervention ○ Favours the intervention ○ Varies ● No included studies	No included studies	Evidence from Reid and colleagues on the economic costs of Māori health inequities demonstrates that the cost of inaction is substantial and enduring [9]. While incorporating mana-enhancing tikanga practices that support whānau Māori breastfeeding and embed Te Ao Māori values such as whanaungatanga and manaakitanga may require moderate investment in workforce capability, service redesign and time, these costs are likely outweighed by the consequences of not acting. Failure to provide culturally safe, mana-affirming breastfeeding support risks lower breastfeeding rates, poorer maternal and infant health outcomes and the perpetuation of inequities, all of which carry significant downstream health system and societal costs.

Equity

What would be the impact on health equity?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ Reduced ○ Probably reduced ○ Probably no impact ● Probably increased ○ Increased ○ Varies ○ Don't know	The Aotearoa New Zealand 2024 national infant exclusively breastfeeding rate at discharge in 2024 was 76.5%. The rate of exclusively breastfeeding at discharge for pēpi Māori was 80.7%, which is higher than the national rate. However, the percentage of pēpi Māori exclusively breastfed decreases by three months and more. At 5 months of age, the rate of exclusively breastfeeding in Māori population is lower than the national rate: 24.3% versus 35.4% [10].	

Acceptability

Is the intervention acceptable to key stakeholders?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ● Probably yes	Promoting mana enhancing tikanga practices that increase Māori breastfeeding is acceptable, equitable, and is necessary to fulfil the Crown's obligations under the Te Tiriti o Waitangi.	

○ Yes ○ Varies ○ Don't know		

Feasibility

Is the intervention feasible to implement?

JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
○ No ○ Probably no ● Probably yes ○ Yes ○ Varies ○ Don't know	There is a lack of available evidence and research on specific interventions to increase mana enhancing tikanga practices. The included studies are mostly qualitative and/or observational studies that report on likely influencers of breastfeeding. Opportunities exist to explore how breastfeeding can be supported from a cultural perspective in a mana enhancing way alongside implementation science to support implementation of support for whānau. Māori leadership in mana enhancing tikanga practices will increase feasibility and support these practices based on the evidence provided for positive and negative influencers. Eg: hapūtananga wananga for whānau Māori, are feasible.	

Summary of judgements

	JUDGEMENT						
DESIRABLE EFFECTS	Trivial	Small	**Moderate**	Large		Varies	Don't know
UNDESIRABLE EFFECTS	**Trivial**	Small	Moderate	Large		Varies	Don't know
CERTAINTY OF EVIDENCE	Very low	**Low**	Moderate	High			No included studies
VALUES	Important uncertainty or variability	**Possibly important uncertainty or variability**	Probably no important uncertainty or variability	No important uncertainty or variability			
BALANCE OF EFFECTS	Favours the comparison	**Probably favours the comparison**	Does not favour either the intervention or the comparison	Probably favours the intervention	Favours the intervention	Varies	Don't know

	JUDGEMENT						
RESOURCES REQUIRED	Large costs	**Moderate costs**	Negligible costs and savings	Moderate savings	Large savings	Varies	Don't know
CERTAINTY OF EVIDENCE OF REQUIRED RESOURCES	Very low	Low	Moderate	High			**No included studies**
COST EFFECTIVENESS	Favours the comparison	Probably favours the comparison	Does not favour either the intervention or the comparison	Probably favours the intervention	Favours the intervention	Varies	**No included studies**
EQUITY	Reduced	Probably reduced	Probably no impact	**Probably increased**	Increased	Varies	Don't know
ACCEPTABILITY	No	Probably no	**Probably yes**	Yes		Varies	Don't know
FEASIBILITY	No	Probably no	**Probably yes**	Yes		Varies	Don't know

Type of recommendation

Strong recommendation against the intervention	Conditional recommendation against the intervention	Conditional recommendation for either the intervention or the comparison	**Conditional recommendation for the intervention**	Strong recommendation for the intervention
o	o	o	•	o

References

1. Bennett, D.; Gilchrist, C.A.; Menzies, R.L.; Harwood, M.; Kingi, T.K.; Atatoa Carr, P.; Morton, S.; Grant, C.C. Determinants of exclusive breastfeeding for wāhine Maori. *N. Z. Med. J.* **2022**, *135*, 73-87.
2. Alianmoghaddam, N.; Phibbs, S.; Benn, C. New Zealand women talk about breastfeeding support from male family members. *Breastfeed. Rev.* **2017**, *25*.
3. Sweet, L.; Muller, A.; Kearney, L.; Martis, R.; Hartney, N.; Davey, K.; Daellenbach, R.; Hall, H.; Atchan, M. Predictors and impact of women's breastfeeding self-efficacy and postnatal care in the context of a pandemic in Australia and Aotearoa New Zealand. *Midwifery* **2022**, *114*, 103462, doi:10.1016/j.midw.2022.103462.
4. Glover, M.; Manaena-Biddle, H.; Waldon, J. Influences that affect Māori women breastfeeding. *Breastfeed. Rev.* **2007**.
5. Glover, M.; Waldon, J.; Manaena-Biddle, H.; Holdaway, M.; Cunningham, C. Barriers to best outcomes in breastfeeding for Maori: mothers' perceptions, whanau perceptions, and services. *J. Hum. Lact.* **2009**, *25*, 307-316, doi:10.1177/0890334409332436.
6. Manhire, K.M.; Williams, S.M.; Tipene-Leach, D.; Baddock, S.A.; Abel, S.; Tangiora, A.; Jones, R.; Taylor, B.J. Predictors of breastfeeding duration in a predominantly Maori population in New Zealand. *BMC Pediatr.* **2018**, *18*, 299, doi:10.1186/s12887-018-1274-9.
7. Alianmoghaddam, N.; Phibbs, S.; Benn, C. The impact of family culture on six months exclusive breastfeeding: A qualitative study in New Zealand. *Breastfeed. Rev.* **2018**, *26*, 23-36.

8. Harris, S.; Bloomfield, F.H.; Muelbert, M. Formal and informal human milk donation in New Zealand: a mixed-method national survey. *Int Breastfeed J* **2024**, *19*, 61, doi:10.1186/s13006-024-00667-4.
9. Reid, P.; Paine, S.J.; Te Ao, B.; Willing, E.J.; Wyeth, E.; Vaithianathan, R.; Loring, B. Estimating the economic costs of Indigenous health inequities in New Zealand: a retrospective cohort analysis. *BMJ Open* **2022**, *12*, e065430, doi:10.1136/bmjopen-2022-065430.
10. Baby Friendly Aotearoa New Zealand. *National infant feeding data for Aotearoa New Zealand*; New Zealand Breastfeeding Alliance: 2024.

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