



UNIVERSITY
OF WOLLONGONG
AUSTRALIA

University of Wollongong
Research Online

Faculty of Science, Medicine and Health - Papers

Faculty of Science, Medicine and Health

2015

Supporting women to achieve breastfeeding to six months postpartum - The theoretical foundations of a successful program

Shahla Meedya

University of Wollongong, smeedya@uow.edu.au

Kathleen Fahy

Southern Cross University

Jenny Parratt

Southern Cross University

Jacqui Yoxall

Southern Cross University

Publication Details

Meedya, S., Fahy, K., Parratt, J. & Yoxall, J. (2015). Supporting women to achieve breastfeeding to six months postpartum - The theoretical foundations of a successful program. *Women and Birth*, 28 (4), 265-271.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

Supporting women to achieve breastfeeding to six months postpartum - The theoretical foundations of a successful program

Abstract

Background Although the benefits of breastfeeding to six months are well-established, only about half of Australian women succeed. The factors associated with successful breastfeeding are rarely translated into effective interventions. A new educational and support program, called the Milky Way program has been demonstrated to be effective in supporting women to achieve prolonged breastfeeding. In the Milky Way program, breastfeeding is considered an embodied performance which requires an engaged combination of body, mind and spirit. This paper aims to explain how the two theories that informed the program were used to better enable women's long term breastfeeding success. **Method** The theory of self-efficacy is first described as a way to develop women's cognitive processes to organise and execute the course of actions to breastfeed for a longer period of time. Birth territory theory is then presented. This theory discusses women as embodied selves; an essential concept for breastfeeding success. Birth territory theory also describes the effects of the holistic environment on the woman and explores the effects of power that is used in the environment. This power can be used integratively to strengthen the woman's breastfeeding confidence and success or, disintegratively which reduces her confidence and undermines her success. **Conclusion** Strategies based on self-efficacy theory are helpful, but are not sufficient to promote breastfeeding to six months. Health educators also need to foster the woman's connection to, and trust in, her body and her baby's body to breastfeed spontaneously. Being aware of environmental impacts on how the woman and baby breastfeed; and using one's own power integratively is crucial to women being able to achieve prolonged breastfeeding.

Disciplines

Medicine and Health Sciences | Social and Behavioral Sciences

Publication Details

Meedya, S., Fahy, K., Parratt, J. & Yoxall, J. (2015). Supporting women to achieve breastfeeding to six months postpartum - The theoretical foundations of a successful program. *Women and Birth*, 28 (4), 265-271.

Title: Supporting women to achieve breastfeeding to six months postpartum – The theoretical foundations of a successful program

Shahla Meedy a,b,*, Kathleen Fahy a, Jenny Parratt a, Jacqui Yoxall c

a School of Nursing and Midwifery, Southern Cross University, Australia

b University of Wollongong, School of Nursing, Australia

c School of Health and Human Sciences, Southern Cross University, Australia

Abstract

Background: Although the benefits of breastfeeding to six months are well-established, only about half of Australian women succeed. The factors associated with successful breastfeeding are rarely translated into effective interventions. A new educational and support program, called the Milky Way program has been demonstrated to be effective in supporting women to achieve prolonged breastfeeding. In the Milky Way program, breastfeeding is considered an embodied performance which requires an engaged combination of body, mind and spirit. This paper aims to explain how the two theories that informed the program were used to better enable women's long term breastfeeding success.

Method: The theory of self-efficacy is first described as a way to develop women's cognitive processes to organise and execute the course of actions to breastfeed for a longer period of time. Birth territory theory is then presented. This theory discusses women as embodied selves; an essential concept for breastfeeding success. Birth territory theory also describes the effects of the holistic environment on the woman and explores the effects of power that is used in the environment. This power can be used integratively to strengthen the woman's breastfeeding confidence and success or, disintegratively which reduces her confidence and undermines her success.

Conclusion: Strategies based on self-efficacy theory are helpful, but are not sufficient to promote breastfeeding to six months. Health educators also need to foster the woman's connection to, and trust in, her body and her baby's body to breastfeed spontaneously. Being

aware of environmental impacts on how the woman and baby breastfeed; and using one's own power integratively is crucial to women being able to achieve prolonged breastfeeding.

Key Words: breastfeeding duration, education, support, self-efficacy theory and breastfeeding territory.

INTRODUCTION

This paper reports on the theoretical framework applied to practice in the Milky Way program which was associated with an increase in the rate of breastfeeding to six months (1). Exclusive breastfeeding to six months has been prioritised by World Health Organisation (WHO) and United Nations International Children's Emergency Fund Australia (UNICEF) health as a lifesaving and health promoting activity (2, 3). The formal breastfeeding education that is provided by Australian health services includes antenatal parenting classes in late pregnancy or ad-hoc advice giving by their care providers (4). These interventions seem to be effective in promoting the initiation of breastfeeding; current rates are about 92 % (5). The advice of doctors, midwives and child health nurses seem, however, to be ineffective in prolonging breastfeeding for six months or beyond (6-15). Indeed, the current rate of exclusive breastfeeding at six months is about 14% and the rate of any breastfeeding at six months is about 50% (5).

Promotion of breastfeeding is a standard inclusion in antenatal education classes, yet a systematic review showed that these classes are ineffective in increasing breastfeeding rates at six months (16, 17). The explanation may partly be due to lack of continuity of care and the way that advice is given. There is some evidence that women feel they are not heard by health professionals who try to convince them into breastfeeding (18). Women who are not intrinsically motivated to start breastfeeding may do so when they are under surveillance but they quickly give up once at home (19). We posit that the main reason for the lack of success is the absence of a clear, woman-centered, theoretical framework that health professionals can use to effectively support women to continue to breastfeed until at least six months postpartum. The key terms for this paper are defined in Table 1.

The Milky Way theoretical framework was based on a review of theory and research that was used to guide the first author when she conducted the Milky Way program during her PhD. This PhD study had a pre and post-intervention design with two groups: primiparous women who intended to breastfeed either received standard care or the Milky Way intervention (1). The Milky Way program comprised three antenatal education sessions and two postnatal phone calls. Standard care in terms of breastfeeding support involved the following components: breastfeeding conversation between the woman and her care provider, paid parenting classes that provided a one-hour breastfeeding session, postnatal education group sessions in the postnatal ward, a follow-up visit from child and family health care nurses and a referral to a lactation consultant if the women had breastfeeding problems. A small number of the women attended hospital parenting classes that involved a one-hour breastfeeding session, 12.6% (n=24) from the Standard care group ($p = 0.739$) and 11.2% (n=17) from the Milky Way group. Compared to standard care, women in the Milky Way group had higher rates of breastfeeding at one (83.7%, $n = 144$ versus 61.3%, 119, $p < .001$), four (64.5%, $n=111$ versus 37.1%, $n = 72$, $p < .001$) and six months (54.3%, $n = 94$ versus 31.4%, $n = 61$, $p < .001$). Assignment to the Milky Way intervention was associated with significantly higher overall rates of breastfeeding (three times more) compared with assignment to standard care ($p < .05$).

This paper begins by summarising the research literature concerning the antenatal modifiable factors that affect the duration of breastfeeding. Then the paper introduces the theoretical foundation of the Milky Way program. The theoretical foundation underpins the intervention's success and demonstrates a philosophical agreement between the theories and the major modifiable factors influencing women's decision to continue breastfeeding. The

aim of this paper is to describe the theoretical framework of the program so that other health professionals can use the same principles to develop similar programs.

Antenatal Modifiable factors

There are many factors that can influence women's decision to breastfeed, but not many of them are modifiable (17). A review of the literature undertaken in 2010 and repeated in 2014 identified the modifiable factors influencing women's breastfeeding decisions for longer periods of time as: breastfeeding intention, her intrinsic power, breastfeeding self-efficacy and social support (1, 17). These reviews found that a woman's breastfeeding self-efficacy and her social support for breastfeeding are predictive of the duration of breastfeeding. However, the reviews also found that the effect of the woman's intention to breastfeed and her connection to and use of her intrinsic power have been under-researched.

There is no woman-centred education and support program where women can connect to their intrinsic power and feel supported to strengthen their embodied mother-infant bonding (1). In a qualitative study by Fenwick, Burns, Sheehan, and Schmied (18), the language and practices of parent educators that facilitated nine antenatal group-based educational sessions were explored. They found that recent breastfeeding education and support has been more focused on the interventional strategies that convince women to commit to breastfeed, and less focused on exploring women's feelings and expectations of their mother-infant relationship (18). The Milky Way program included all these elements, specifically women's breastfeeding intention, intrinsic power, self-efficacy and social support. The program was designed within a theoretical framework that aimed to optimising women's breastfeeding self-efficacy to draw on their deep hidden capabilities as embodied selves (1). The following part of the paper presents more details on the theoretical framework of the Milky Way program.

THE THEORETICAL FRAMEWORK

In designing the Milky Way program we reviewed potentially relevant theories to create the theoretical framework. We chose the theory of self-efficacy and added the theory of birth territory to create a holistic, woman-centred theoretical framework.

Theory of Self-efficacy

The construct of self-efficacy sits within Bandura's social cognitive theory which purports that there is a reciprocal and dynamic relationship between behaviour; environmental factors and interpersonal factors (cognitive, emotional and biological) (20). Bandura (20, 21) postulates that an individual's cognitive process in relation to other factors significantly influences his/her behaviour. Bandura (21) refers to self-efficacy as an individual's belief in his/her capability to plan and execute a series of actions in terms of their performance of a specific task or behaviour. He argues that those with high self-efficacy are more likely to persevere with a task, for a longer period of time, in order to achieve a desired outcome (21).

Dennis (22) constructed the concept of 'breastfeeding self-efficacy' from Bandura's theory of self-efficacy. She explained how women's breastfeeding self-efficacy can influence their thoughts and actions to initiate and continue breastfeeding. Dennis (23) claimed that breastfeeding self-efficacy is a salient variable in duration of breastfeeding. According to Dennis (22), women with high breastfeeding self-efficacy are more likely to think positively and find solutions to overcome obstacles to breastfeeding. These women use self-enhancing thought patterns and envision themselves as successful performers. Furthermore, Dennis (22, 23) claims that women with high breastfeeding self-efficacy will be able to control their anxiety and emotional disturbances to stay calm and respond appropriately when they need extra support. Research supports that an individual's behaviour or task performance can be

influenced by their self-efficacy (20, 22-36). In a randomised controlled trial of 889 Australian women, Forster, McLachlan, and Lumley (37) found a significant relationship between high breastfeeding self-efficacy scores and duration of breastfeeding at four months ($\lambda^2 = 14.89$, $p < .001$). Dennis (23) recommended strategies to improve women's breastfeeding self-efficacy. Some studies have used these strategies and demonstrated success in increasing woman's sense of self-efficacy; however, none of those studies were effective in promoting prolonged breastfeeding (30, 32, 34-36, 38).

In designing the Milky Way program we returned to the original work by Bandura seeking additional strategies to influence women's breastfeeding self-efficacy with the aim of increasing the duration of breastfeeding. Bandura (39) identified four primary sources of information that affect an individual's sense of self-efficacy: 1) performance accomplishment, 2) vicarious experience, 3) verbal persuasion and 4) emotional arousal. Performance accomplishment is the most powerful source of self-efficacy (39). Bandura (21) stresses the importance of practising courses of action that will be needed in the future to manage constantly changing life circumstances and overcome obstacles. Once people become convinced they have what it takes to succeed, they are more likely to persevere to achieve their goals and quickly recover from setbacks (21). For example, women who have previously succeeded at breastfeeding to six months have high self-efficacy that they can do it again. Performance accomplishment means that the individual has learned via corrective reinforcement how to perfect the desired skills using cognitive, behavioural and emotional self-regulatory efforts (39).

Vicarious experience or modelling, is the second type of information that can impact self-efficacy, according to Bandura (39). Both terms refer to observational learnings where

individuals search for role models and observe the effective skills and strategies that the role models apply to manage environmental demands (21, 40). Individuals can observe the attitudes, styles of competencies and attainments of different people, including those from other cultures (21). Modelling has been classified into three types: effective actual modelling (observing people in everyday life), symbolic modelling (observing other people through television or other social media) and cognitive self-modelling (visualising oneself) (21). Modelling that uses both visualisation and cognitive rehearsal is more likely to build stronger self-efficacy than solely watching other people performing a task (21). Exemplification of success through sustained effort with cognitive self-modelling and symbolic modelling can be more effective than symbolic modelling only (41). A strategy to enhance women's self-efficacy might therefore involve providing women with DVDs or simple posters to take home and watch with family and friends as often as they wish. Women may also be encouraged to cognitively rehearse by being asked to visualise themselves breastfeeding and enjoying bonding with their babies.

Verbal persuasion can influence people's sense of efficacy (21). When other people express trust and confidence in a person's capabilities to perform a behaviour, that person's self-efficacy is increased (21). In contrast, when other people express lack of confidence and doubt about a person's capabilities, the person's self-efficacy diminishes (39). People who have been persuaded that they lack capabilities tend to avoid challenging activities and give up when facing obstacles (21). For example, when a woman is persuaded that she will not be able to breastfeed, because her mother could not, she may be more likely to give up breastfeeding when any discomfort or challenge occurs. The following elements can be considered during verbal persuasion:

- a) attention to the successful or improved aspects of breastfeeding performances;

- b) reinforcement of positive breastfeeding skills;
- c) provision of consistent advice on how to improve future breastfeeding performances;
- d) encouragement to recall the positive aspects of breastfeeding performances purposefully rather than to dwell solely on performance deficits;
- e) provision of anticipatory guidance which acknowledges and normalises maternal anxiety, stress, and fatigue; and,
- f) proactive attention to making the unobservable breastfeeding skills apparent to the mother, such as envisioning successful performances, thinking analytically to solve problems, managing self-defeating thoughts, and persevering through difficulties (23).

The physiological and affective states (emotional reaction) of people in specific situations can also influence their self-efficacy (42). People's interpretation of physiological and affective states is influenced by several factors. Appraisal – the way people mentally weigh and label the arousals – can affect people's interpretation of physical or emotional reactions (21). For example, when a woman feels highly emotional about experiencing fatigue, aches and pain after a long labour, she may not feel efficacious to breastfeed when her baby demonstrates unsettled behaviour. However, if the woman labels that feeling as a normal physiological response, her emotional arousal will be less likely to diminish her self-efficacy.

Second, physiological reactions are interpreted differently depending on the person's emotional status (21). Even the emotional reactions of others in the same situation can affect individuals' perceived judgment (21, 43). People with low mood are more likely to misjudge their physical reactions as a sign of coping deficiencies (21). Therefore, people in low mood

will interpret their physical arousal negatively as they recall the bad memories and reactivate a whole view of inadequacy and worthlessness.

Third, prior beliefs and experiences create biases in the interpretation and cognitive processing of physiological and emotional responses. Low self- efficacy in the past is more likely to undermine an individual's coping capabilities and increase their sensitivity to their bodily reactions (21). Therefore, it is important for breastfeeding women to receive accurate information and feedback about their physiological changes after birth and during breastfeeding. By normalising physiological changes and responses during breastfeeding, women are encouraged to feel that their bodily status is normal and therefore they have nothing to worry about. For example, having the knowledge that it is normal to feel tired after birth is less likely to lower a woman's breastfeeding self-efficacy.

Theory of Birth Territory

The use of theory of birth territory in the Milky Way program stems from the theory of birth territory and midwifery guardianship. The theory of birth territory is about supporting women to draw from the deep, hidden capabilities within their embodied selves as they respond to childbearing challenges (44-46). For the purposes of the theory, birth refers to that period extending from peri-conception to early parenting. The theory is therefore applicable to the woman and the baby at all stages of childbearing, including the postpartum period and breastfeeding (47). The birth territory theory describes, explains and predicts how a woman's wellbeing as an embodied whole is affected by the integrative power or disintegrative power as used by themselves or by others (46). As a result of using integrative power, a woman is likely to feel good about herself, and this will create satisfaction with breastfeeding and greater adaptation after birth and during early mothering. Disintegrative power, by a woman

or significant others including support people and health professionals, potentially acts as a negative influence on initiating and maintaining breastfeeding.

The main concepts involved in the birth territory theory include terrain, jurisdiction, embodied self, integrative and disintegrative power, and midwifery guardianship. These concepts are defined and discussed below.

The terrain

In birth territory theory, terrain refers to the physical, geographical and dynamic features of individual childbirth space that affect women and babies (47). Women may find their terrain a place to optimise their ease, comfort and privacy. This type of terrain, called sanctum, makes the woman feel safe and confident (46). According to Fahy (47)“an experience of ‘sanctum’ protects and potentially enhances the woman’s embodied sense of self; this is reflected in optimal physiological function and emotional wellbeing”.

In contrast, the woman may find that her terrain is a surveillance environment, in which she feels unsafe and uncomfortable because other people are expecting her to do what they think is right for her. Fahy (47) postulates that deviation from sanctum will reduce the woman’s sense of self, inhibit physiological function and reduce emotional wellbeing by causing emotional distress. For instance, when a woman feels pressure to commit herself to breastfeed by her support people or health professionals, her normal physiological reaction can be inhibited by her emotional stress. Women may feel unsafe to breastfeed because they have not absorbed the breast-is-best messages from our society; or they may have heard messages from family or friends saying they couldn't breast feed or didn't have enough milk and may be anxious about their own ability. This will result in malfunction of the woman’s let-down reflex, which can lead to the perception of low milk supply (47).

Jurisdiction

Jurisdiction in birth territory theory refers to the power to do as one wants within the birth environment (47). Power is defined as an energy that makes a person enabled to do or obtain what the person wants (48). This power can be internal or external. Jurisdiction varies between two types of power: integrative power and disintegrative power (46). These two concepts, which are directly related to midwifery guardianship, are discussed below. However, the underlying concept of the embodied self is essential to understanding all the concepts associated with jurisdiction, and is discussed first.

Embodied self

The embodied sense of self is felt as a living body, embodied ego and spiritual being (49). Parratt (49) defines the embodied self as the integration of body, mind and soul as a whole. According to Parratt (49) the sense of embodied self-changes over time; that change is based on interactions between the woman's intrinsic power and the external powers operating in her environment. The embodied self is able to create unique strategies to deal with challenges that arise during breastfeeding. To be able to optimise a woman's sense of self during lactation, nurses and midwives need to enhance her capacity to feel herself as an embodied whole and intrinsically powerful person.

Integrative power and disintegrative power

Integrative power is the integration of all forms of power within the environment to achieve a shared goal (45, 50). Integrative power aims to support a woman in responding spontaneously and expressively to her bodily sensations and intuitions (50). The use of integrative power integrates her body, mind and spirit as a whole and results in optimised psychophysiological wellbeing (50). Providing a physically and emotionally safe environment is very important to

enhance the use of integrative power (44). For instance, a woman who initiates breastfeeding in the birthing room needs a quiet and private place with minimum stimulation to enjoy the first moments with her child and her family. When a woman trusts her body and connects to her inner power, the "loving hormone" (oxytocin) will be released from the brain, which creates feelings of calm (51, 52). Oxytocin also improves the mother's learning abilities, enhances her social memory and facilitates love and attachments (52). Enhancing the capacity for integrative power to be exercised enables women to feel good about their embodied self and adapt more easily to the challenges of early mothering.

In contrast, disintegrative power disintegrates the woman's inner power within the environment (44, 45). It is an ego-centred power and anybody in the territory, including the woman, the midwife and the partner, can use disintegrative power (44). Disintegrative power in any form impairs the woman's ability to respond spontaneously to her bodily sensations and intuition (44). When a woman feels coerced by midwives or by her partner to breastfeed, her own inner power will be cut off. In such cases, she might initiate breastfeeding in the hospital as a result of her ego-centred need to feel emotionally safe from criticism while under surveillance. However, once she leaves the hospital she might stop breastfeeding which may in turn lead to feelings of a diminished sense of self. In a qualitative study by Williams, Donague and Kurz (46), (n=35) the majority of women experienced feelings of guilt when they ceased breastfeeding. These authors believe that expert discourse about benefits of breastfeeding is associated with the feelings of guilt in women (46) which aligns perfectly with birth territory theory. Midwives, nurses, doctors, health professionals and women's social environment can stimulate women's egocentric power if they use disintegrative power which may result in destroying the unity of mind, body and spirit (44). A woman who uses her egoic power to continue breastfeeding will limit her intrinsic power

(inner power) to stay safe in the society and not be judged against the social norm, which would make the woman feel less good about herself when she stops breastfeeding. Following coerced breastfeeding, a woman's feeling of self-appreciation will be limited sooner or later. She is highly likely to stop breastfeeding, as she may not be satisfied with her feelings, which may be conflicted.

Midwifery Guardianship

Midwifery guardianship, as a sub-concept of integrative power, promotes the use of integrative power by women during childbearing (44). Anybody, regardless of their profession, who takes the role of being truly with woman can provide midwifery guardianship (46). For instance, doctors who support women to feel strong and enhance women's integrative power can act as guardians. Whereas, midwives who are dominating can diminish women's sense of self by using disintegrative power (46). Midwifery guardianship, therefore, is open to midwives, doctors and support people. Midwifery guardians enable women to slow down their everyday thinking mind, trust their body and stay connected with their intrinsic power (50). The desired outcome of midwifery guardianship is to assist women to feel strong and empowered during breastfeeding even if their breastfeeding experience does not go the way they had planned.

Breastfeeding Territory

In order to develop the Milky Way program, the concept of breastfeeding territory was extracted from the theory of birth territory and midwifery guardianship. Breastfeeding territory refers to the space/s in which a woman feels confident to breastfeed whenever and wherever she wants. Breastfeeding territory can be perceived as either a sanctum or a surveillance area. A breastfeeding sanctum is any place where the woman feels safe and comfortable to breastfeed her child with love and care. When the place is perceived as being under surveillance, it creates emotional distress with autonomic arousal; this can inhibit the

woman's mind and body from breastfeeding successfully. When the woman perceives her breastfeeding territory as a sanctum, the release of oxytocin is facilitated; this, in turn, enhances bonding with her child, optimises her physiological wellbeing and – most importantly – lets her spirit soar.

Guardianship of the breastfeeding territory involves the midwives (or other health professionals) using their power integratively with the woman, aiming to support the woman to draw on her deep, inner, embodied power to optimise her sense of self-efficacy during lactation. Health professionals also encourage the woman's social support people to be breastfeeding guardians by using their power integratively to enhance the woman's sense of security in her breastfeeding territory. For instance, a woman's family and friends can provide her with the emotional support and physical assistance to create and maintain an environment that is perceived to be a breastfeeding sanctum. In such a sanctum the woman can then feel secure enough to let her bodily sensations and intuition take over during breastfeeding. Therefore, it is important to involve women's support people in breastfeeding educational programs and encourage them to learn how to provide emotional support, express trust, create a safe and pleasant environment, give positive feedback and offer physical assistance. The following recommendations can be used during education and support interventions to enhance integrative power and support women's sense of embodied self during breastfeeding:

- a) encouraging support people to provide a quiet and private place with minimum stimulation in first few weeks after birth;
- b) encouraging support people to avoid criticism so the woman feels emotionally safe;
- c) providing non-judgmental comments during support of the breastfeeding woman;

- d) reinforcing for the women how important it is to relax and focus on bonding with their child during breastfeeding;
- e) encouraging women to trust themselves and recall their inner power to make decisions; and,
- f) encouraging women to find their own safe environment during breastfeeding.

Discussion

This paper has described the theories of self-efficacy and birth territory as the theoretical framework for the Milky Way program. Self-efficacy increases perseverance at a task. Individuals' self-efficacy is influenced by multidimensional information, including previous experience, vicarious experience, verbal persuasion and physiological responses. However, it is important to recognise that there is a power apart from the cognitive side of women; this power can drive women to continue and enjoy breastfeeding without controlling their surroundings. The first author (SM), who practices as a midwife and lactation consultant, has come across many angry women who felt that they were coerced to breastfeed against their will. She has also consulted women who felt guilty when they stopped breastfeeding and felt defeated. Women will often discontinue breastfeeding if they chose to breastfeed just because of other people's wishes or if they do not believe in it.

Women's breastfeeding decisions should come from their inner self, not as a result of social pressure. Intrinsic power comes from within the woman; it helps women embody breastfeeding for a long period of time. Therefore, creating a healthy balance between intrinsic and extrinsic power in women's breastfeeding territory boosts women's feelings of safety and enhances their sense of embodied self. This, in turn, results in optimised physiological wellbeing. Midwifery guardianship enables midwives and other health

professionals to protect women's breastfeeding territory and to help women improve their sense of self as embodied whole selves. When midwifery guardianship is successful, women will feel good about themselves regardless of their breastfeeding practices. Both self-efficacy theory and Birth Territory theory strengthen the Milky Way program in terms of breastfeeding intention, confidence and social support.

Conclusion

The theoretical framework of the Milky Way program was based on a combination of self-efficacy and birth territory theories. This framework has a woman-centred and holistic foundation which can be used in practice, policy and education. The framework can be adopted by lactation consultants, parent educators, child and family health nurses, midwives and other health professionals who have been trained to support breastfeeding women. We recommend that health professionals foster each woman's connection to, and trust in, her body and her baby's body to breastfeed. We also recommend that, at the same time, health professionals nurture their own awareness of the external power operating between the woman and her support people. Using one's own power integratively is crucial to women being able to achieve prolonged breastfeeding. Designing programs based on this framework enables women to feel self-efficacious and create the necessary breastfeeding territory wherever, and whenever, they need to breastfeed.

Acknowledgments

We would like to thank all the women who participated in the Milky Way program and all the staff in Women and Children Health Out-patient Department at Liverpool hospital who provided great support during implementation of the Milky Way program.

References

1. Meedya S, Fahy K, Yoxall J, Parratt J. Increasing breastfeeding rates to six months among nulliparous women: a quasi-experimental study *Midwifery*. 2014;30(3):e137-e44.
2. UNICEF Australia. Baby Friendly Health Initiative. 2014; Available from: <http://www.unicef.org.au/Discover/Australia-s-children/Baby-Friendly-Hospital-Initiative.aspx>.
3. World Health Organization. Planning Guide for National Implementation of the Global Strategy for Infant and Young Child Feeding. Geneva: World Health Organisation; 2007. Available from: http://whqlibdoc.who.int/publications/2007/9789241595193_eng.pdf.
4. Svensson J, Barclay LM, Cooke M. Antenatal education as perceived by health professionals. *Antenatal Education*. 2007;16(1):9-15.
5. Australian Health Ministers' Conference. The Australian National Breastfeeding Strategy 2010-2015. Canberra: Australian Government Department of Health and Ageing; 2009.
6. Forster D, McLachlan H, Lumley J, Beanland C, Waldenström U, Amir L. Two mid-pregnancy interventions to increase the initiation and duration of breastfeeding: A randomized controlled trial. *Birth*. 2004 September;31(3):176-82.
7. Heinonen K, Raikkonen K, Pesonen AK, Andersson S, Kajantie E, Eriksson JG, et al. Longitudinal study of smoking cessation before pregnancy and children's cognitive abilities at 56 months of age. *Early Hum Dev*. [Article]. 2011 May;87(5):353-9.
8. Kronborg H, Maimburg RD, Vaeth M. Antenatal training to improve breast feeding: A randomised trial. *Midwifery*. 2012 December;28(6):784-90.
9. Kronborg H, Vaeth M, Olsen J, Iversen L, Harder I. Effect of early postnatal breastfeeding support: a cluster-randomised community based trial. *Acta Paediatrica*. [Article]. 2007 Jul;96(7):1064-70.
10. Mattar CN, Chong YS, Chan YS, Chew A, Tan P, Chan Y-H, et al. Simple antenatal preparation to improve breastfeeding practice: A randomised controlled trial. *American College of Obstetricians and Gynecologist*. 2007 January;109(1):73-80.

11. McDonald SJ, Henderson JJ, Faulkner S, Evans Sf, Hagan R. Effect of an extended midwifery postnatal support programme on the duration of breast feeding: A randomised controlled trial. *Midwifery*. 2010 February;26(1):88-100.
12. Pugh LC, Milligan RA, Frick KD, Spatz D, Bronner Y. Breastfeeding duration, costs, and benefits of a support program for low-income breastfeeding women. *Birth: Issues in Perinatal Care*. 2002;29(2):95-100.
13. Quinlivan JA, Box H, Evans SF. Postnatal home visits in teenage mothers: A randomised controlled trial. *The Lancet*. 2003;361(9361):893-900.
14. Tahir NM, Al-Sadat N. Does telephone lactation counselling improve breastfeeding practices? A randomised controlled trial. *International Journal of Nursing Studies*. 2013;50(1):16-25.
15. Wilhelm SL, Stepan MBF, Hertzog M, Rodehorst TKC, Gardner P. Motivational interviewing to promote sustained breastfeeding. *Journal of Obstetric, Gynecologic and Neonatal Nursing*. 2006;35(3):340-8.
16. Henderson J, Redshaw M. Midwifery factors associated with successful breastfeeding. *Child Care Health Dev*. [Article]. 2011 Sep;37(5):744-53.
17. Meedya S, Fahy K, Kable A. Factors that positively influence breastfeeding duration to 6 months: A literature review. *Women and Birth*. 2010;23(4):135-45.
18. Fenwick J, Burns E, Sheehan A, Schmied V. We only talk about breast feeding: A discourse analysis of infant feeding messages in antenatal group-based education. *Midwifery*. 2013;29(5): 425-33.
19. Racine E, Frick K, Carpenter D, Pugh R. How motivation influences breastfeeding duration among low-income women. *Journal of Human Lactation*. 2009;25(2):173- 80.
20. Bandura A. On the functional properties of perceived self-efficacy revisited. *Journal of Management*. 2012;38(9):9-44.
21. Bandura A. *Self-efficacy: The exercise of control*. New York: Freeman and Company; 1997.

22. Dennis CL. Theoretical underpinning of breastfeeding confidence: a self-efficacy framework. *Journal of Human Lactation*. 1999;17(3):183-200.
23. Dennis CL. The breastfeeding self-efficacy scale: Psychometric assessment of the short form. *Journal of Obstetric, Gynecologic and Neonatal Nursing*. 2003;32(6):734-44.
24. Bandura A. Social cognitive theory: An agentic perspective. *Annual Review of Psychology* [serial on the Internet]. 2001; 52.
25. Bandura A. Social cognitive theory in cultural context. *Applied Psychology*. 2002 April;51(2):269-90.
26. Bandura A. The primacy of self-regulation in health promotion. *Applied Psychology*. 2005;54(2):245-54.
27. Bandura A, Locke E. Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology*. 2003 February;88(1):87-99.
28. Dennis CL. Breastfeeding initiation and duration : A 1990-2000 literature review. *Journal of Obstetric, Gynecologic and Neonatal Nursing*. 2002;31(1):12-32.
29. Dennis CL. Breastfeeding peer support: Maternal and volunteer perceptions from a randomised controlled trial. *Birth*. 2002;29(3):169-76.
30. Hatamleh W. Prenatal breastfeeding intervention program to increase breastfeeding duration among low income women. *Health and Place*. 2012;4(3):143-9.
31. Kingston D, Dennis CL, Sword W. Exploring breastfeeding self-efficacy. *Journal of Perinatal Neonatal Nursing*. 2007;21(3):207.
32. McQueen KA, Dennis C, Stremler R, Norman CD. A pilot randomized controlled trial of a breastfeeding self-efficacy intervention with primiparous mothers. *Journal of Obstetric, Gynecologic and Neonatal Nursing*. 2011 2011 Jan-Feb;40(1):35-46.
33. Nichols J, Schutte N, Brown RF. The impact of a self-efficacy intervention on short-term breast-feeding outcomes. *Health Education and Behavior*. 2009;36(2):250-8.

34. Noel-Weiss J, Bassett V, Cragg B. Developing a prenatal breastfeeding workshop to support maternal breastfeeding self-efficacy. *Journal of Obstetric, Gynecologic and Neonatal Nursing*. 2006 May/June;35(3):349-57.
35. Otsuka K, Taguri M, Dennis C-L, Wakutani K, Awano M, Yamaguchi T, et al. Effectiveness of a breastfeeding self-efficacy intervention: Do hospital practices make a difference? *Maternal and Child Health Journal*. 2014;18(1):296-306.
36. Wu D, Hu J, McCoy T, Efid J. The effects of a breastfeeding self-efficacy intervention on short-term breastfeeding outcomes among primiparous mothers in Wuhan, China. *Journal of Advanced Nursing [serial on the Internet]*. 2014.
37. Forster D, McLachlan H, Lumley J. Factors associated with breastfeeding at six months postpartum in a group of Australian women. *International Breastfeeding Journal* 2006;1(18):1-18.
38. Hatamleh W. *The effect of a Breast-Feeding Self-Efficacy Intervention on Breast Feeding Self-Efficacy and duration Cincinnati: University of Cincinnati; 2006.*
39. Bandura A. Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*. 1977;84(2):191-215.
40. Bandura A. *Social foundation of thoughts and action: A social cognitive theory*. Englewood Cliffs: Prentice-Hall; 1986.
41. Maibach E, Flora J. Symbolic modeling and cognitive rehearsal: using video to promote AIDS prevention self-efficacy. *Communication Research*. 1993;20(4):517-45.
42. Bandura A. Swimming against the mainstream: The early years from chilly tributary to transformative mainstream. *Behaviour Research and Therapy*. 2004;42(6):613-30.
43. Weiten W. *Psychology: Themes and variations, briefer version*. 9th ed. Sydney: Wadsworth Cengage; 2014.
44. Fahy K, Hastie C, Foureur M, editors. *Birth Territory and Midwifery Guardianship: Theory for practice, education and research*. Edinburgh: Elsevier; 2008.

45. Fahy K, Parratt J. Birth Territory: A theory for midwifery practice. *Women Birth*. 2006;19(2):45-50.
46. Williams K, Donaghue N, Kurz T. Giving Guilt the Flick?: An Investigation of Mothers' Talk About Guilt in Relation to Infant Feeding. *Psychology of Women Quarterly*. 2013; 37(1), 97-112
46. Fahy K, Parratt J, Foureur M, Hastie C. Birth Territory: A Theory for Midwifery Practice. In: Bryar R, Sinclair M, editors. *Theory for Midwifery Practice*. 2nd ed. Palgrave: Basingstoke; 2011. p. 215-40.
47. Fahy K. Theorising birth territory. In: Fahy K, Hastie C, Foureur M, editors. *Birth Territory and Midwifery Guardianship: Theory for practice, education and research*. 1st ed. Edinburgh: Elsevier; 2008. p. 11-20.
48. Northrup C. *Women's bodies, Women's wisdom*. Piatkus: Bath; 1998.
49. Parratt J. *Feeling Like a Genius: Enhancing women's changing embodied self during first childbearing*. Newcastle: The University of Newcastle; 2010.
50. Fahy K, Hastie C. Midwifery guardianship: Reclaiming the sacred in birth. In: Fahy K, Hastie C, Foureur M, editors. *Birth Territory and Midwifery Guardianship: Theory for practice, education and research*. Edinburgh Elsevier; 2008. p. 21-37.
51. Foureur M. Creating birth space to enable undisturbed birth. In: Fahy K, Hastie C, M F, editors. *Birth Territory and Midwifery Guardianship: Theory for practice, education and research*. Edinburgh: Elsevier; 2008. p. 57-78.
52. Uvnas-Moberg K, Petersson M. Oxytocin, a mediator of anti-stress, well-being, social interaction, growth and healing. *Zeitschrift für Psychosomatische Medizin und Psychotherapie*. 2005;51(1):57-8.

Table 1.

Glossary of key terms.

Glossary of key terms

Breastfeeding	An infant-feeding method where the child receives some breast milk and can also receive any food or liquid including non-human milk. ⁵³ Thus the term <i>breastfeeding</i> includes exclusive, predominant and complementary breastfeeding.
Breastfeeding self-efficacy	A woman's perceived ability to breastfeed her newborn. ⁵⁴
Breastfeeding territory	Breastfeeding territory has been extracted from the theory of Birth Territory and Midwifery Guardianship, it is defined as a woman's territory whenever and wherever she wants to breastfeed. ¹
Disintegrative power	An ego-centred power that disintegrates other forms of power within the environment. ⁵⁰
Embodied ego	An embodied power of ego ⁵⁵ that reflects a rational, reflective, self-defining, value-based power of embodied self. ⁴⁹
Embodied self	An integrated whole body/soul/mind who is continually changing depending on the various contexts of existence. Encompasses the lived experiences of a person as a sexual, spiritual, embodied being. ⁴⁹
Emotion	A cognitive, physiological and behavioural component that involves a subjective conscious experience, bodily arousal and expression of characteristics. ⁴³
Integrative power	A power that aims to support a woman to respond spontaneously and expressively to her bodily sensations and intuitions. ⁵⁰
Intention	A plan that has been formulated to achieve a particular goal stated through certain instrumental actions. ⁵⁶
Intrinsic power	The power of inner self in relation to embodied; and a non-rational spontaneous power that is experienced in the current moment which influences future knowing, action and power. ⁴⁹
Jurisdiction	The power to do as one wants within the birth environment. ⁴⁷
Living body	A uniquely experienced diverse biological organism that grounds existence of the self as a being who is embodied. ⁴⁹
Midwifery Guardianship	A sub-concept of integrative power; promotes the use of integrative power by women during childbearing. ⁵⁰
Optimised	The experience of mind, body and soul working seamlessly together in a way that is most advantageous to

Glossary of key terms

psychophysiological wellbeing	the embodied self. ⁴⁹
Performance accomplishments	Corrective reinforcement towards the perfection of skills through cognitive, behavioural and self-regulatory efforts. ²¹
Physiological responses	Physiological and emotional reactions that impact on people's self-efficacy beliefs. ²¹
Power	An energy that enables a person to do or obtain what the person wants. ⁴⁴
Self-efficacy	People's beliefs in their capabilities to organise and execute the course of actions required to produce given attainments. ²¹
Social support	A woman's perception of supportive behaviours from others in her social network that she believes will ultimately be beneficial to her. Women experience support when they receive care, concern, respect, understanding, advice, encouragement and practical help. ⁵⁷
Soul	The experienced spiritual part of self. ⁵⁸
Spirit	The power that drives the world and the cosmos. ⁴⁹
Spiritual being	The spiritual part of self as an indivisible part of universal energy in a human being. ⁴⁹
Terrain	The physical, geographical and dynamic features of individual childbirth space that affects women and babies. ⁴⁷
Theory	A theory presents a systematic view of phenomena by specifying the interrelationships between concepts using definitions and propositions with the purpose of explanation and prediction. ⁵⁹
Verbal persuasion	Other people's expression of trust and confidence in one's capabilities to perform a behaviour that increases one's sense of efficacy. ²¹
Vicarious experience	Observational learnings where individuals search for role models and observe the effective skills and strategies that the role models apply to manage environmental demands. ²¹