Infant Feeding Practices

Pranee Liamputtong
Editor

Infant Feeding Practices

A Cross-Cultural Perspective

Springer

Editor
Pranee Liamputtong
School of Public Health
La Trobe University, Bundoora
Victoria 3086, Australia
pranee@latrobe.edu.au

ISBN 978-1-4419-6872-2 e-ISBN 978-1-4419-6873-9
DOI 10.1007/978-1-4419-6873-9
Springer New York Dordrecht Heidelberg London

Library of Congress Control Number: 2010936427

To all the children in my life:

Kristin, Daniel, Zoe, Wiranut, Emma, Lalita, Nonthapat, Natthapat, Bunnalin, Marlo, Peeyapat, Thanavanit & Max

Preface

This book is born out of my personal life. I breastfed my two children for a long period. My first daughter, Zoe, was breastfed for 2 years, and Emma, my younger one, was breastfed for 4 years. Often, people made comment about my behaviour, saying that it was unusual for a mother to breastfeed her children this long. But then, they also said that since I was born in Thailand, things might be different for Thai people. So, my ethnicity was seen to be my excuse. But others congratulated me for doing so. I even won a prize at a breastfeeding conference in Melbourne for practising prolonged breastfeeding. My curiosity grew as I observed what other women do in regard to infant feeding; and since I commenced my research on reproduction and motherhood, infant feeding issues have always been my great interest.

Breastfeeding is a contentious issue. It is seen as beneficial for both a newborn infant and a mother. It is also profoundly supported by both lay individuals and professionals. However, infant feeding practices occur within the social and cultural context of the society in which women live. And as we have witnessed, not all women and their families necessarily see such benefits. There are many reasons that has prevented or stopped women from breastfeeding their newborn infants. There are other important issues that may impact on infant feeding practices of women and these include social class, ethnicity, socio-economic status and geographical location. These discussions will be included in this book.

In the past few decades, we have also seen a dramatic increase in the rates of women living with HIV/AIDS and many of these women are also mothers with young infants. Due to the infection, women living with HIV/AIDS are advised not to breastfeed their infants. Most of these mothers are from poor backgrounds and their poverty has a great impact on their feeding practices. How do these mothers deal with these issues? What can the government and local authorities do to assist these women? Some of these questions will be discussed in several chapters in this volume.

In this book, I also bring together salient issues regarding cultural beliefs and practices in different societies. I shall show that despite advanced medical knowledge in infant feeding, traditions continue to exert influence on how the women and their families manage to feed their infants in their societies. Women have attempted to preserve valued traditional beliefs and practices although they accept innovations

in the management of infant feeding in response to social and cultural changes. Likewise, traditions surrounding infant feeding practices continue to live despite the fact that many societies have been modernised. Some explanations will be discussed through some of the chapters in this volume.

The book provides a comprehensive coverage of infant feeding issues from a cross-cultural perspective. The book comprises chapters written by researchers who carry out their projects in different parts of the world. Each chapter contains empirical information, which is based on real life situations. This can be used as an evidence for health care providers to implement socially and culturally appropriate services, which will assist women who are mothers and their young babies in many societies.

The book will be of interest to health care providers who have their interests in working with women and infant feeding practices from a cross-cultural perspective. They will be useful for students and lecturers in courses like midwifery, anthropology, sociology, social work, nursing, public health and medicine. The book will also attract many lay readers and those in organisations which are interested in infant feeding practices from a cross-cultural perspective.

In bringing this book to life, I owe my gratitude to many people. First, I should like to thank all contributors in this volume, who worked hard in constructing their chapters and getting it to me in the required time. Second, I should like to thank Springer for believing in the value of this book. Last, I am grateful to Rosemary Oakes, my dear friend who helped reading through several chapters for me. I dedicate this book to all the children in my family.

Bundoora, VIC, Australia Pranee Liamputtong
February 2010

About the Book

This book comprises four parts. It begins with an introduction which aims to set the scene of this book. Pranee Liamputtong introduces issues which are salient to infant feeding beliefs and practices across cultures. These include infant feeding within a socio-cultural context, cultural beliefs and practices regarding infant feeding in diverse cultures, infant feeding practices and mothers' employment outside the home, the impact of HIV and AIDS on infant feeding practices, and authoritative knowledge of health professionals regarding infant feeding practices.

Part I is dedicated to the socio-cultural perspective of infant feeding and policy framework. It is composed of four chapters. In Chapter 2, Orit Avishai writes about how women manage the lactating body by making reference to the 'Breast-Feeding Project in the age of anxiety'. She contends that public health campaigns aimed at increasing breastfeeding rates in the United States rest on the twin premises that the 'breast is best' and that breastfeeding is 'natural'. Her chapter draws on interviews with class-privileged American mothers to demonstrate that far from 'natural', breastfeeding decisions, practices and experiences are shaped by historical, cultural, political and social norms and customs. The chapter examines how this group of women makes decisions about infant feeding and their breastfeeding practices. Orit demonstrates that these women construct the lactating body as a carefully managed site and breastfeeding as a mothering project – a task to be researched, planned, implemented and assessed, supported by expert knowledge, professional advice and consumption. Viewed in this light, 'the breast is best' and 'breastfeeding is natural' are impoverished slogans that do not capture the extent to which both the science and the imagery of breastfeeding are shaped by normative assumptions and middle-class experiences. The chapter also diverges from the emphases on pleasure, embodied subjectivity, relationships and empowerment that characterise much of the recent breastfeeding literature across the humanities, arguing that these normative/political agendas do not reflect empirical realities.

Chapter 3 is written by Jane Scott on attitudes to breastfeeding. Jane suggests that a women's decision to initiate and continue breastfeeding is influenced by her attitude towards breastfeeding as well as the breastfeeding attitudes of significant referent people (e.g. partner, family and friends), and society in general. If she perceives that her breast milk will adequately nourish her infant and that breastfeeding is convenient and better for the health of her infant, then she will have positive

attitudes towards breastfeeding. However, her efforts to breastfeed may be undermined by the attitudes of those around her particularly, in Western cultures, the attitude of her partner. Fathers have been shown to participate in and influence the choice of infant feeding method by acting as key supports or deterrents to breastfeeding by the mother. Without the emotional and practical support of their partners most mothers will struggle to successfully establish and maintain breastfeeding. In Western cultures, while most people acknowledge that breastfeeding is the best way to feed infants, there is still a common perception that breastfeeding is a private function and that breastfeeding in public is inappropriate. This perception is formed in part by Western society's inability to dissociate the functional and sexual role of the breasts. Furthermore, the way that breastfeeding is portrayed in the media does much to promulgate this perception. On the whole, breastfeeding is seldom portrayed in the entertainment media and, when it is, it is often presented as being problematic. The positive portrayal of breastfeeding on television and film and in other public arenas will go a long way towards making it 'normal' in our society; positively influencing a woman's perception that breastfeeding is the social norm when it comes to feeding her infant.

In Chapter 4, Athena Sheehan and Virginia Schmied discuss about the imperative to breastfeed from an Australian perspective. They point out that research demonstrates many women choose to breastfeed their baby based on the concept that 'breast is best'. This is not surprising given that the benefits of breastfeeding are broadly promoted and a number of strategies have been deliberately employed globally and nationally to actively support and promote breastfeeding. They argue that in Australia, there is an imperative to breastfeed both socially and professionally. In this chapter, they explore the imperative to breastfeed in Australia from two perspectives. The chapter opens with an overview of International and National breastfeeding strategies and policies to illustrate the Public Health imperative to breastfeed, and examines the professional perspective on breastfeeding and the impact of these policies on their practice. To further examine the imperative to breastfeed, they present findings from a study that explored women's infant feeding experiences and decision-making in the first 6 weeks post-birth. This study demonstrates from the women's perspective the personal, social and professional imperative to breastfeed and the concomitant impact on their experiences and interpretations. For example, women not only believe breastfeeding is presented as the 'best' nutritionally but they also believe it is promoted as 'easy' 'doable' and fixable' with an underlying expectation that a good mother breastfeeds. These beliefs, when unfulfilled, can lead to a loss of confidence and a need to justify their position as a mother. They use women's stories to demonstrate these interpretations as well as others and the impact these understandings have on women's experiences. Finally, they conclude the chapter with a discussion examining the tensions and possible contradictions arising out of the public health, professional, social and personal discourses that influence breastfeeding practices. They argue that far more effort needs to be placed on supporting women to breastfeed using strategies identified by women themselves to achieve their breastfeeding goals in the weeks and months following birth.

Ellie Lee writes about infant feeding and the problem of policy in Chapter 5. She argues that how a mother feeds her baby is a decision for her to make. Yet, infant feeding is surrounded by conventions and precepts about appropriate maternal decisions. British women feed their babies in a policy context where no ambivalence is associated with attaching breastfeeding to only important benefits for individual children, mothers and the wider society. Social scientific research indicates that the presumptions of policy are to some extent widely shared; assessments of mothers' attitudes to infant feeding show they mostly agree 'breast is best'. Yet, practice departs greatly from official advice. One interpretation of this difference is that mothers are more ambivalent about the benefits of breastfeeding in practice than in the abstract. Research utilising social scientific methods has largely not concerned itself with exploring maternal ambiguity and ambivalence, as the paradigm informing most studies is a public health perspective. A small number of studies have, however, utilised social science methods to generate important insights about the tensions between policy and maternal practice and experience. This chapter summarises findings of her work indicating three major themes: breastfeeding promotion and the individualisation of social problems; 'scientisation' and the effacing of maternal choice; and moralisation and the problem of moral jeopardy. It concludes by indicating future possibilities for socio-cultural research about infant feeding.

Part II is about motherhood, work and infant feeding practices. It comprises four chapters. Chapter 6 focuses on social and cultural factors that shape decision-making around sustaining breastfeeding and is written by Joyce Marshall and Mary Godfrey. They suggest that in the United Kingdom, women's beliefs, attitudes and behaviours around breastfeeding are shaped by myriad influences and by changing social and structural factors and cultural mores. Whilst public health discourse equates breastfeeding with 'good mothering' and health professionals emphasise 'breast as best', these normative values compete with other standards or criteria of 'good mothering' held by others within women's social networks that exert influence on them. Moreover, cultural and structural factors affect the pattern of women's labour market participation. Specifically, when public policy that emphasises return to paid work is aligned with policies directed at reconciling work and family, this can act as constraints on sustaining optimal breastfeeding, that is, exclusive breastfeeding for 6 months as advised by the World Health Organisation. For women in their study, initiating and sustaining breastfeeding was subject to a complex process that contributed to multiple-valued outcomes: nurturing thriving and healthy babies, experiencing themselves as 'competent' mothers, successfully managing shifting identities and negotiating competing pressures in the real-life context of their daily lives and relationships with 'significant others'. Even as women struggled to present and see themselves as 'good mothers', they were active agents and not just acted upon. They sought to reconcile the value they placed on breastfeeding with seeing themselves and being seen by others as 'good mothers'. Thus, they sought out situations where breastfeeding was highly valued (such as support groups), and developed strategies to counter or avoid threats to their sense of themselves as nurturing and competent mothers that was related to, but not synonymous with,

sustaining breastfeeding. Midwives and health visitors in their study encouraged women to breastfeed, but not in the way that this is generally portrayed in much of the current literature. Analysis of observed interactions between women who had chosen to breastfeed and midwives and health visitors suggests more of a negotiated encounter in which these health professional considered the whole situation of the woman and her struggle to be a 'good mother'.

Following on from Chapter 6, Caroline Jane Gatrell dedicates her discussion on managing the work of breastfeeding and employment in Chapter 7. Caroline's chapter considers how, while breastfeeding is promoted within health policy as the ideal form of infant nutrition, such policy fails to address two major obstacles faced by new mothers who are attempting to breastfeed. The first obstacle concerns the idea that breastfeeding is a 'natural' activity, an assumption which overlooks the problems experienced by women who struggle to breastfeed. The second obstacle relates to the chasm between health expectations that 'good' mothers should breastfeed, and wider social attitudes towards breastfeeding, which are discouraging. Finally, the chapter observes how mothers who 'struggle' to breastfeed are affected by feelings of guilt and anxiety.

Issues relevant to breastfeeding practice among employed women from a Thai cultural perspective is written by Susanha Yimyam in Chapter 8. She suggests that breastfeeding is a natural female function, and is also a customary method of infant feeding. In Thailand, breastfeeding initiation is a nearly universal practice. However, the breastfeeding duration was shortened. Her chapter derives from a combined qualitative and quantitative study, which investigated the relationship between socio-economic, cultural factors and breastfeeding among 300 employed women in Northern, Thailand. Susanha found that Thai women have positive attitudes towards breastfeeding and breast milk in terms of the nutritious, immunological, behavioural and economic benefits. The peak rates of breastfeeding at 1 month also coincide with the period of confinement called '*yu daun*'. Within this period, the women have to rest at home and are relieved of all household chores, only caring for their infants for a month. Generally, these traditional beliefs and practices provide an opportunity for the women to adjust to their new role as a mother. Since both mother and baby always stay together, they can learn from each other. Moreover, strong social endorsement of the value of breastfeeding (and the obligation it places on the next generation) reinforces the benefits of breastfeeding during confinement. However, some cultural beliefs and practices can act as barriers to breastfeeding. These include perceptions that 'breastfeeding can cause infant illness', 'there is no breast milk in the first few days', 'breast milk later in lactation is inadequate in nutritional value', and the practice of giving a bottle of water or formula at an early age. Together with a lack of knowledge about the mechanics of breastfeeding, or how to solve breastfeeding problems, these notions may diminish confidence and lead to early weaning. Therefore, it appears that cultural beliefs and practices, combined with support from family members, may be the most important factors influencing breastfeeding practices in the first month in northern Thailand.

In Chapter 9, Pranee Liamputtong and Somsri Kitisriworapan discuss issues relevant to good mother and infant feeding practices in northern Thailand. They argue

that breastfeeding is profoundly supported by both professionals and lay individuals. It is claimed that breastfeeding is beneficial for both a newborn infant and a mother. However, not all women and their families necessarily perceive it as such. Infant feeding practices occur within the social and cultural context of the society in which women live. Although women understand the value of breast milk, many women choose not to breastfeed their infants or may try to combine breastfeeding with bottle-feeding. In the several past decades, rapid social and economic transformations have changed women's lives in many parts of the world. Thai women have also been caught in this change. Since the 1960s when the country's economy has become increasingly dependent on the global market economy, women in Thailand have entered the labour force as a way to increase their family income. Many women in the North work outside the home as well as perform housework. Labour force participation for women in the childbearing years has increased rapidly, particularly in the non-agricultural sector. These changes have profoundly affected women, motherhood and infant feeding practices. In this chapter, Pranee and Somsri discuss discursive practices regarding infant feeding amongst mothers in Northern Thai society. In particular, they focus on how mothers perceive and experience breastfeeding and how they feed their infants.

Part III is dedicated to issues relevant to infant feeding practices and HIV/AIDS. There are four chapters in this part. In Chapter 10, Lucy Thairu writes about the historical account of HIV/AIDS transmission through breast milk in sub-Saharan Africa. She points out that in the 1980s, the finding that HIV can be transmitted through breast milk resulted in heated controversies over the potential benefits of breastfeeding versus bottle-feeding for HIV+ mothers in resource-poor settings such as in Africa. The early part of the 1990s was marked by ambiguity, uncertainty and fear about the rising rates of paediatric HIV/AIDS due to mother-to-child transmission. By the late 1990s, the results of various epidemiological studies had shown that, in the absence of antiretroviral therapy (ART), HIV-free survival was similar for breastfed versus bottle-fed infants. By the turn of the century, it was clear that exclusive breastfeeding before 6 months of ages increased the risk of HIV transmission. At the close of this decade, the results of epidemiological research indicate that, compared to replacement feeding, exclusive breastfeeding and antiretroviral therapy (ART) result in similar HIV-free survival. Breastfeeding, in conjunction with ART, is considered the best intervention in resource-poor settings as it reduces the risk of HIV transmission through breast milk and has the added advantage of improving the health of HIV-positive mothers. Looking ahead, the provision of consistent information about the importance of exclusive breastfeeding, coupled with early ART initiation, will be critical in efforts to improve child health and survival in the context of HIV/AIDS.

In Chapter 11, challenges and opportunities regarding infant feeding in the era of HIV is written by Tanya Doherty. Accordingly, Tanya suggests, child health specialists and health care workers in many resource-limited settings are challenged by the infant feeding dilemma posed by HIV. Whereas previously breastfeeding, especially exclusive breastfeeding, was a key child survival strategy, the finding that HIV is present in breast milk has led to a re-assessment of the benefits of

breastfeeding. This has led to reduced efforts globally to promote exclusive breastfeeding, a key child survival intervention. Although the World Health Organisation, UNICEF and Inter-agency Task Team (WHO/UNICEF/IATT) have been at the forefront of developing simple consistent approaches and tools for infant feeding in the context of HIV, challenges of implementation remain. For HIV-positive women, the transmission of HIV through breast milk has created a dilemma; the benefits of breastfeeding, and the risks of not breastfeeding, have to be weighed against the risk of HIV transmission through breastfeeding. Whilst intrauterine and intrapartum transmission can be substantially reduced through improved drug regimens, modifying infant feeding practices in order to reduce postnatal transmission is complex and difficult to achieve. This chapter reviews the evidence with regard to infant feeding and HIV with a particular focus on the experiences of HIV-positive women and challenges of implementing recommended feeding methods. It will also present interventions and strategies for supporting women in their feeding choices and opportunities to strengthen infant nutrition in the general population.

Alice Desclaux and Chiara Alfieri discuss issues facing competing cultures of breastfeeding: the experience of HIV-positive women in Burkina Faso in Chapter 12. They suggest that in low-resource areas of West Africa, where infant feeding patterns are dominated by prolonged breastfeeding, the prevention of mother-to-child HIV transmission requires new feeding practices: formula feeding or exclusive breastfeeding limited to 6 months followed by rapid weaning. Both patterns are innovations for the majority of women in all social categories at the local level. As innovations, these practices are applied only under certain conditions met by mothers. They also have social consequences. Two ethnographic studies conducted in 1998–2000 and in 2003–2007 explored women's perceptions about 'good infant feeding' with implications for 'good mothering', and the social relationships that are involved in infant feeding management in a setting shaped by a patrilinear organisation. These studies also show the contradictions that HIV-positive women face in two local sub-cultures of breastfeeding: the one involving the baby's father, the family and neighbourhood, and the other involving health services and PLHIV support organisations. Women must rely on a range of strategies to face difficulties related to the lack of economic or social autonomy or support from the child's father, the risk of stigma, social norms regarding breastfeeding and contradictory discourses among health workers. HIV-positive mothers' experiences bring to light several key features of local infant feeding cultures, including the changes that occurred over the last 10 years regarding the role of the fathers, the impact of infant feeding conceptualisation in biomedical institutions and the promotion of a model of infant care based on the dual mother-and-child relationship. These dimensions are considered in relation to general social trends in a West-African society regarding the autonomy of women, the role of the couple in the household, and the medicalisation of infant feeding.

In Chapter 13, relevant to infant feeding and HIV, Rachel Bezner Kerr, Laura Sikstrom and Laifolo Dakishoni discuss what they refer to as 'fluid boundaries' and multiple meanings of the illness '*moto*' in northern Malawi. They suggest that, for over two decades, high levels of child malnutrition have been observed

in Malawi, and have been linked to infant and complementary feeding practices. Previous research in northern Malawi indicated that early introduction of non-breast milk foods and liquids had negative effects on child growth, and grandmothers were actively involved in early child feeding decisions. The objectives of their study were to examine local child care practices, knowledge of childhood illnesses and the underlying explanatory theories that give meaning to people's practices and observations when children become ill. Sixty-eight qualitative, in-depth interviews, two focus groups, ethnographic observation and participatory workshops were held over a 4 year period as part of an ongoing participatory agriculture and nutrition research project in Mzimba district, Malawi, in the region surrounding the town of Ekwendeni. The purpose of the research was to understand child feeding practices and concepts in order to develop a culturally appropriate strategy for the prevention and treatment of child malnutrition. One child illness, called '*moto*', which means fire or heat in chiTumbuka is considered a syndrome of symptoms including fever, coughing, weight loss and diarrhoea that affects primarily young children and sometimes elderly people. The cause of this illness is conceptualised as '*wajumpikha*' or the idea of 'crossing over' cultural taboos and expectations. In this case, crossing the boundary refers to having sex, either postpartum (considered a 'taboo' period for marital sexual relations) or extra-maritally. These types of sexual practices were considered to have dire effects on the health of young children, and had a direct impact on child feeding practices and care. This chapter discusses these research findings in relation to Malawi's high HIV prevalence and chronic food shortages, and discusses areas of further inquiry and the possible implications for community-based nutrition education programs.

Part IV focuses on infant feeding beliefs and practices within specific sociocultural context. There are eight chapters in this last part. In Chapter 14, Gerd Holmboe-Ottesen and Penjani Kamudoni write about issues from traditional breastfeeding practices to optimal breastfeeding practices, using the cases of the Gambia and Malawi as example. They suggest that the scientific evidence for the health benefits of breastfeeding has increasingly grown and is undisputable. These benefits are maximised when breastfeeding is initiated immediately after birth, without any feeds or liquids before, and is exclusive in the first 6 months, lasting until at least 2 years even after other feeds are introduced. Such practices have therefore been optimal breastfeeding. Policy recommendations have since followed to promote optimal breastfeeding through the public health care system at both global and national government levels. However, traditionally breastfeeding is perceived differently within the context of customs and taboos. This is well illustrated among the Yao people in Malawi; as well as among the Chagga, Wagogo and Haya in Tanzania. For these tribal groups, it is customary to give pre-lacteal feeds to prevent some childhood illnesses. Among the Chagga introducing supplementary foods early is perceived as a way of familiarising the child to other foods. The discrepancy between the strongly scientifically grounded policy recommendation for optimal breastfeeding and the reality of breastfeeding in a traditional setting raises the discussion of what it will take to build a new culture of optimal breastfeeding. Interventional programs at both policy and community levels have to an extent bridged the gap, although limited

to the groups exposed to the interventions. A notable policy intervention has been the Baby Friendly Hospital Initiative, whose primary purpose is to support mothers to optimally breastfeed and to protect them against infant formula influences. In health facilities where the initiative has been implemented, longer breastfeeding duration and early breastfeeding has been noticed. Community-based interventions have been shown to influence mothers in prolonging the period of exclusive breastfeeding. The chapter discusses whether interventions on optimal breastfeeding will have a lasting effect. This seems to be dependent on the scope of focus and extent of scaling up of interventions, and will thus depend on availability of resources.

Marewa Glover and Chris Cunningham write about the perceptions of Māori women and their whānau (family) towards barriers in achieving best outcomes in infant breastfeeding in Chapter 15. Accordingly, breastfeeding was the only way babies were fed in pre-European times, which for Māori was only 150 years ago. Today, however, Māori are more likely than other cultural groups in New Zealand to feed their infants artificial baby milk from birth. The perceptions of Māori women and their whānau (family) towards barriers in achieving best outcomes in infant breastfeeding were explored in this chapter. It focuses on factors perceived as barriers and on issues to do with health services. Exploratory interviews with 59 Māori women aged over 16 years who had given birth in the previous 3 years, and 27 whānau members were undertaken. Women who solely artificially fed their babies were under-represented in the research. Although mothers and whānau members felt positively towards breastfeeding, and generally expected to fully breastfeed children, these expectations remained unmet in many cases because of lack of support soon after childbirth when establishing breastfeeding. Other determinant factors include lack of support when life circumstances change, lack of timely, culturally relevant and comprehensible information, confusion about bed-sharing and tobacco smoking while feeding, and self-imposed beliefs of the lack of acceptance of public breastfeeding. The relatively high rates of tobacco use by Māori created a tension for mothers' breastfeeding, and this was identified by women as a reason for breastfeeding ending prematurely.

Chapter 16 focuses on breastfeeding among Indigenous mothers in Australia and is written by Jane Scott and Colin Binns. They suggest that traditionally, the Australian Aboriginal people were hunter-gatherers and breastfeeding was universal and prolonged. European colonisation and the subsequent loss of traditional lands disrupted this hunting and gathering existence and the ensuing years of European settlement saw a gradual drift of Indigenous clans from their nomadic lifestyle to settlement in, or on the fringes of, rural towns and major cities. This increasing urbanisation was accompanied by a decline in traditional feeding practices and today Indigenous mothers are less likely to initiate breastfeeding than non-Indigenous mothers. However, Indigenous mothers in remote communities are more likely to breastfeed than Indigenous mothers living in urban areas and continue to breastfeed for longer than both urban Indigenous and non-Indigenous women. Infections (mainly respiratory, gastrointestinal and otitis media) are far more prevalent in Indigenous children than non-Indigenous children. Breastfeeding is one way

to ensure that short- and long-term health benefits are passed on to Indigenous children and should be actively promoted and supported as a means of *closing the gap* between the health outcomes of Indigenous and non-Indigenous children and adults.

In Chapter 17, issues relevant to breastfeeding, vertical disease transmission and the volition of medicines in Malawi are discussed by Robert Pool, Christopher Pell, Blessings Nyasilia Kaunda, Don Mathanga and Marjolein Gysels. Their chapter is based on data collected in central Malawi as part of a large multi-centre acceptability study of intermittent preventive treatment of malaria in infants (IPTi). It describes women's perceptions of breast milk as being 'good' or 'bad', their beliefs about the transmission of malaria and other diseases through breastfeeding, and the effect of malaria medication taken by the mother on the disease of her infant. It discusses the notion that medicines have volition and are only efficacious in the individual for whom they are intended. As a result, even though women may think that malaria medication they have taken can be passed on to their infant through breastfeeding, they think that this medicine will have no effect on their infant because it is only meant for the mother. The implications of using these ideas to improve adherence to medication administered at home are also discussed in this chapter.

Chapter 18 focuses on infant feeding beliefs and practices in Islamic societies, focusing on Turkey as a case in point and is written by Meliksah Ertem. She suggests that culture profoundly influences health knowledge, attitudes and behavior and this is particularly true of infant feeding practices. The benefits of breastfeeding to mother and the health of infants have long been known and breastfeeding is practiced in Turkey. In this chapter, Meliksah describes infant feeding practices of women living in rural areas of Turkey in the context of beliefs, traditions, and cultural values. In Turkey, nearly 1.5 million new births take place each year and 95% of newborns are breastfed. Turkish mothers both in rural and urban have positive opinion on breast milk. They consider breast milk as the best nutrient for infants; and according to their opinion, it should be introduced without interruption. So as not to interrupt breastfeeding, when a mother is away from her infant, another breastfeeding mother may continue. However, there is a wide range of beliefs, perceptions and practices in infant feeding, which negatively affect appropriate breastfeeding. For example, in rural Turkey, colostrum is deemed unsuitable for babies. Some also believe that babies should not be fed anything before 'three calls to prayer (*ezan*)' or that sugar water should be introduced first, before breast milk, to 'clean' the stomach. Exclusive breastfeeding is very rare in Turkey. Mothers supplement breast milk before 6 month by introducing liquids or solid foods. Mothers believed in the contraceptive effect of breastfeeding. Some mothers prolonged breastfeeding to avoid pregnancy, controversially some of them stop to have new baby. In rural Turkey, mothers breastfeed their infants anywhere whenever the baby needs it. This is an accepted norm and men just turn their eyes away with respect and walk from the area. How mothers obtain their health-related information also affects infant feeding practices. Often, the source of the information is older people living in the same family, and health professionals do not have the desired influence on mothers' behavior on infant feeding practices. For example, in rural area of Southeastern

region of Turkey, nearly 60% of mothers are illiterate and cannot speak the official language of Turkey. Those mothers have a poor chance to be informed about infant feeding. Certain beliefs centre surround mothers during postpartum periods. The new mothers and their infants are vulnerable to supernatural powers. Both the woman and her baby should not be left alone by themselves at home, and a needle, bread, knife and onion are put under their pillows to protect them against supernatural powers. Insufficient milk appears to be the major reason for early introduction of weaning foods. If baby cries after breastfeeding, or if they feel that their infant is small, mothers interpret that as the result of insufficient breast milk. The reasons shown by mothers for insufficient breast milk included mothers' nutrition, sadness and hereditary features.

Yuko Nakao and Sumihisa Honda, in Chapter 19, write about early initiation of breastfeeding and its beneficial effects in Japan. They point out that in Japan, the proportion of mothers who breastfed exclusively at 1 month was 71% in the 1960s; this figure decreased to 32% in the 1970s and has been low ever since (42% in 2005). In 2005, there were only 40 baby-friendly hospitals in Japan, which represents only 1.3% of the total number of Japanese maternity hospitals. Kangaroo mother care for low birth weight infants was introduced in Japan in 1998. Kangaroo mother care has now expanded to include full-term infants in most Japanese maternity hospitals, since kangaroo mother care has been shown to have some beneficial effects, including promotion of mother's milk secretion. Early skin-to-skin contact is also common in Japanese maternity hospitals. However, the Japanese tradition of bathing a baby immediately after birth continues, as does the use of supplemental feeding with sugar water. The World Health Organization recommends helping mothers initiate breastfeeding within a half-hour of birth in Step 4 of *Evidence for the Ten Steps to Successful Breastfeeding*. However, there is controversy about the importance of breastfeeding within 30 min after delivery. Their previous study showed that early breastfeeding after delivery was significantly associated with continuation of full breastfeeding. Logistic regression analysis indicated that the proportion of mothers who continued full breastfeeding at 4 months was 2.5-fold higher in those who breastfed their baby within 2 hours compared with more than 2 hours. Moreover, maternal satisfaction with first breastfeeding was also associated with early initiation of breastfeeding within 2 hours. Some mothers described their feelings about breastfeeding in a questionnaire as 'I felt motherly love', 'I felt calm' and 'I had greater pleasure with childbirth'. Early breastfeeding not only increased the proportion of mothers maintaining full breastfeeding but also produced positive mental effects in the mothers. They contend that helping mothers initiate early breastfeeding, especially within 2 hours, is strongly recommended for child and maternal health.

Chapter 20 focuses on socio-cultural determinants of infants' feeding patterns within 6 months postpartum in rural Vietnam and is written by Dat Van Duong. The chapter is based on a longitudinal study investigating socio-cultural factors, which influence infant feeding patterns within 6 months postpartum amongst women residing in rural Vietnam. The study was conducted during August 2002–June 2004 in Quang Xuong district, Thanh Hoa Province of Vietnam. In the first phase, 463

women were prospectively examined at weeks 1, 16 and 24 postpartum. During the second phase, sixteen qualitative focus group discussions were conducted to obtain complementary information. It found that exclusive breastfeeding dropped from 83.6% at week 1 to 43.6% at week 16, and by week 24, no infant was exclusively breastfed. Home-cooked solid food was introduced by 4.8, 40.9 and 74.3% of women at weeks 1, 16 and 24, respectively. Mother-related factors such as education level, occupation and comfort to breastfeed in public places significantly influence infants' feeding patterns. In addition, father-related factors such as occupation, feeding preference, satisfaction with the infant's sex were significant determinants of infant feeding practices of mothers. Moreover, the study found influences of close relatives and friends to the mother's decision on infant feeding practices. It also revealed a strong influence of commercial advertisement of formula industries on mother's decision. It suggests that community mobilisation for sharing the workload with women could help them to cope with employment and breastfeeding. Dat concludes that health education on breastfeeding should target at both mother and father taking into account local socio-cultural features.

The last chapter in this volume, Chapter 21, is related to attitudes and practices about infant feeding of women born in Turkey and Vietnam following migration to Australia and is written by Helen McLachlan and Dalla Forster. They contend that cultural variations exist in the proportion of women who initiate and continue breastfeeding, and for some cultural groups, migration to a new country is associated with a reduction in both initiation and duration of breastfeeding. This chapter describes the initial infant feeding attitudes and practices of women born in Vietnam, Turkey and Australia who gave birth in Australia. One hundred Turkish-born, 100 Vietnamese-born and 100 Australian-born women who gave birth in a large, tertiary referral hospital in Melbourne, Australia, were interviewed in hospital prior to discharge. Almost all Turkish women initiated breastfeeding (98%) compared with 84% of Australian women. Vietnamese women had the lowest rate of breastfeeding initiation (75%). They also perceived their partners to be more negative about breastfeeding and did not value the health benefits of colostrum to the same extent as women born in Turkey and Australia. Despite the 'Baby Friendly' status of the hospital where the study was conducted, 40% of Vietnamese women gave their baby formula in hospital. The hospital environment is a key area where care providers can make a difference to breastfeeding initiation. Given the widely known benefits of breastfeeding, further research should explore interventions that may increase the proportion of Vietnamese women who breastfeed following migration.

About the Editor

Pranee Liamputtong holds a Personal Chair in Public Health at the School of Public Health, La Trobe University, Melbourne, Australia. Pranee has previously taught in the School of Sociology and Anthropology and worked as a public health research fellow at the Centre for the Study of Mothers' and Children's Health (now Mothers and Child Health Research), La Trobe University. Pranee's particular interests include issues related to cultural and social influences on childbearing, childrearing, and women's reproductive and sexual health.

Pranee has published several research method books. Her first research method book is titled *Qualitative Research Methods: A Health Focus* (with Douglas Ezzy, Oxford University Press, 1999, reprinted in 2000, 2001, 2003, 2004); the second edition of this book is titled *Qualitative Research Methods* (2005, reprinted in 2006, 2007, 2008); and the third edition is authored solely by herself (*Qualitative Research Methods, 3rd edition*, 2009). Pranee has also published a book on doing qualitative research online: *Health Research in Cyberspace: Methodological, Practical and Personal Issues* (Nova Science Publishers, 2006). Her new books include: *Researching the Vulnerable: A Guide to Sensitive Research Methods* (Sage, London, 2007); *Undertaking Sensitive Research: Managing Boundaries, Emotions and Risk* (with Virginia Dickson-Swift and Erica James, Cambridge University Press, 2008); *Knowing Differently: Arts-Based and Collaborative Research Methods* (with Jean Rumbold, Nova Science Publishers, 2008); *Doing Cross-Cultural Research: Ethical and Methodological Issues* (Springer, 2008); *Research Methods in Health: Foundations for Evidence-Based Practice* (Oxford University Press, 2010): and *Performing Qualitative Cross-Cultural Research* (Cambridge University Press, 2009). She is completing a book on *Focus Group Methodology: Principles and Practices* for Sage, London, which will be published in early 2011.

In her own research, Pranee has published several books and a large number of papers in these areas. These include: *Maternity and Reproductive Health in Asian Societies* (with Lenore Manderson, Harwood Academic Press, 1996); *Asian Mothers, Western Birth* (Ausmed Publications, 1999); *Living in a New Country: Understanding Migrants' Health* (Ausmed Publications, 1999); *Hmong Women and Reproduction* (Bergin & Garvey, 2000); *Coming of Age in South and Southeast Asia: Youth, Courtship and Sexuality* (with Lenore Manderson, Curzon Press, 2002);

Health, Social Change and Communities (with Heather Gardner, Oxford University Press, 2003). Her more recent books include: *Reproduction, Childbearing and Motherhood: A Cross-Cultural Perspective* (Nova Science Publishers, 2007); *Childrearing and Infant Care Issues: A Cross-Cultural Perspective* (Nova Science Publishers, 2007); *The Journey of Becoming a Mother amongst Thai Women in Northern Thailand* (Lexington Books, 2007); and *Population, Community, & Health Promotion* (with Sansnee Jirojwong, Oxford University Press, 2008). She is now completing a book on *Motherhood and Postnatal Depression: Narratives of Women and their Partners*, for Springer (with Carolyn Westall), and will be published in 2011. She is also an editor in the series of books on HIV/AIDS and the Social Sciences. Two books are being edited: *Stigma, Discrimination and Living with HIV/AIDS: A Cross-Cultural Perspective*, and *Motherhood and Living with HIV/AIDS: A Cross-Cultural Perspective*.

About the Contributors

Chiara Alfieri is an ethnologist member of Centre de Recherche Cultures, Santé, Sociétés (Université Paul Cézanne d'Aix-Marseille and Institut de Recherche pour le Développement, France). She has been doing research on infant care practices particularly amongst the Bobo-Madare around Bobo-Dioulasso (Burkina Faso) for more than 15 years.

Orit Avishai is an Assistant Professor of sociology at Fordham University. Her work on breast-feeding has appeared in *Qualitative Sociology* and in the *Journal of the Association for Research on Mothering*. Her entry on breast-feeding is forthcoming in the *Encyclopedia of Gender and Society* (Sage Publications). Her current work focuses on women's experiences with conservative religions.

Rachel Bezner Kerr is an Assistant Professor in the Department of Geography at the University of Western Ontario. She has collaborated in a participatory agriculture and nutrition research project, the Soils, Food and Healthy Communities (SFHC) project, for the past 8 years in northern Malawi. She conducts research on feeding practices, agricultural methods, social dynamics and historical precedents that have implications for improved food security, child nutrition and soil fertility in the region. Rachel and her husband Wayne live in London, Ontario, Canada with their two children, but spend considerable time each year in Ekwendeni, Malawi.

Colin W. Binns was foundation of Head of the School of Public Health at Curtin University, a position he held for 21 years and continues as Professor of Public Health. He was Vice-President of the Asia Pacific Academic Consortium for Public Health and is now Deputy Editor in Chief of the Asia Pacific Journal of Public Health. He holds visiting professorial positions at Kagawa Nutrition University, Tokyo and University of Ryukus, Okinawa in Japan, Tonji Medical College Wuhan and Changsha Children's Hospital, PR China and Inje University, Korea. He has served on 17 committees of the National Health and Medical Research Council, including Chair of the Dietary Guidelines Committees for infants, children, adults and elderly Australians. He has published 330 articles in scientific journals in the areas of breastfeeding, public health nutrition and epidemiology. In 2004, he was given the award of Senior Western Australian of the Year and was awarded an honorary PhD from Inje University, Korea for public health research in Asia.

Chris Cunningham is Professor of Maori Health and Director of the Research Centre for Maori Health & Development at Massey University. His research interests include whanau (family) health, cancer, diabetes, ethics and Maori workforce development. He is currently supervising 18 doctoral students – the majority indigenous – in New Zealand, Australia and the United States.

Laifolo Dakishoni started working with Ekwendeni Hospital's Soils, Food and Healthy Communities project in 2001. He studied at the Malawi College of Accounting, where he earned a diploma in accounting. His passion for improving child nutrition through participatory method drove him to become involved with the SFHC project. Laifolo has been actively involved in the qualitative research on child feeding and is an adept interviewer. He lives in Mzuzu with his wife Brenda and his four children.

Alice Desclaux is MD and Professor in Medical anthropology at Université Paul Cezanne d'Aix-Marseille (UPCAM, France). She has done extensive fieldwork on social transformations related to HIV, mainly in West Africa, regarding women and children in the health system. Presently, she works on the anthropology of long-term treatment amongst HIV-positive persons in Dakar (Sénégal) for Institut de Recherche pour le Développement (IRD, UMR 145).

Tanya Doherty is a specialist scientist at the Medical Research Council in South Africa. She has qualifications in Nursing, Public Health, and a PhD in International health with a focus on HIV and infant feeding. Since 2002, she has undertaken research on the PMTCT (prevention of mother to child transmission of HIV) programme in South Africa. This has included two national evaluations, a prospective cohort study and a community intervention trial.

Dat Van Duong holds the first degree on pharmacy. He also has a Master of Public Health and PhD from Curtin University of Technology, Western Australia. He has strong experiences in maternal and child health related issues in developing countries. He is currently working as a head of reproductive health unit at United Nations Population Fund in Vietnam.

Meliksah Ertem is a Professor at the Department of Public Health Faculty of Medicine, Dicle University Diyarbakir, Turkey. Born in Diyarbakir, Turkey, in 1965, she graduated from Medical School in 1989 and received her degree of 'Public Health Specialist' in 1995. She has held a position as a Professor of Public Health since 1995. Her research topics of interest are reproductive health and maternal and child health, especially breastfeeding, vaccination and malnutrition.

Della A. Forster is a Midwifery Consultant at the Royal Women's Hospital in Melbourne, and a Senior Research Fellow at Mother and Child Health Research, La Trobe University. Her research interests include all aspects of pregnancy, birth and the postnatal period, and her PhD was based on a large randomised controlled trial investigating the effect of antenatal education on breastfeeding initiation and duration.

Caroline Jane Gatrell is a Lecturer in Management Learning and Leadership at Lancaster University Management School. Her research focuses on the maternal body and work, and she is engaged in examining relationships between birth and maternal labour in the context of heteronormativity and professional employment, family practices, and the maternal body. Caroline's new research monograph 'Embodying Women's Work' was published in 2008.

Marewa Glover (Tribe: Ngā Puhi) is Director of Auckland Tobacco Control Research Centre, the University of Auckland. She works on building contemporary Māori knowledge and research capacity to improve indigenous health. Her areas of research include: smoking cessation, smoking in pregnancy, infant feeding and Māori attitudes to Assisted Human Reproduction.

Mary Godfrey is a Senior Research Fellow at the Leeds Institute of Health Sciences, University of Leeds. A sociologist, her substantive research interests are lay conceptions of health and illness and user defined outcomes to inform models of integrated health and social care service systems. She has a particular interest in involving participants in all aspects of the research process and in exploring the impact of professional/lay research partnerships in generating knowledge.

Marjolein Gysels studied African linguistics at the University of Ghent (Belgium), and received a PhD in 1996 in cultural anthropology from the University of Amsterdam. She has carried out ethnographic research in D.R. Congo on Swahili and oral literature. She also worked on HIV/AIDS related projects in Tanzania focusing on female infertility, commercial sex workers and truck drivers. Then, at King's College London, she carried out research on palliative care for 5 years. More recently, she has been involved in the literature scoping on the delivery and organisation of generalist services for adults at the end of life for a project funded by the UK NHS Service Delivery and Organisation (SDO), and she has managed a programme on breathlessness in advanced and progressive disease. In 2006, she joined CRESIB, where she managed a programme investigating the acceptability of intermittent preventive treatment in Infants (IPTi), in five African countries, and is currently managing a component of the PRISMA project aimed at developing understanding of cultural issues in end of life care.

Gerd Holmboe-Ottesen holds a PhD in Nutrition Epidemiology and is a Professor in community nutrition. She has worked with child nutrition with more focus on child feeding practices, child nutrition status and its correlation to caregivers in agricultural occupation in Sri Lanka, Tanzania and Botswana.

Sumihisa Honda is an Associate Professor in the Department of Public Health, Nagasaki University School of Medicine, Japan. He has been actively involved in many epidemiologic studies with his expertise in biostatistics.

Penjani Kamudoni is a PhD fellow at the Institute of Community Health and General Practice. She is a community nutritionist. As part of her PhD work, she will work on an intervention study on promoting optimal breastfeeding through peer support. She has previously worked with therapeutic child feeding in Malawi.

Blessings Nyasilia Kaunda is a Social Scientist based at Malaria Alert Center (MAC), an autonomous institution affiliated with the University of Malawi, College of Medicine. She is a graduate of Chancellor College, a constituent of University of Malawi with a major in Sociology and a Public Administration minor. Her main research interests include anthropological work and sociology in relation to public health. She has presented a paper on the acceptability of intermittent preventive treatment of malaria in infants (IPTi) at national level and is in the process of drafting papers for publication on the same. Currently, she is managing four malaria sentinel sites across the country and plans to pursue a masters degree in medical anthropology.

Somsri Kitisriworapan is an Associate Professor at the Kasetsart University's Demonstration School, Thailand. She teaches social science, history and Thai language at both primary and secondary levels. Her main interests are on the health and psychology of children and her research has involved children's understanding of health and social issues.

Ellie Lee is a Senior Lecturer in social policy at the University of Kent. Her research interests are in the sociology of reproduction, health and the family. Her publications include *Abortion, Motherhood and Mental Health* (Aldine Transaction 2003) and *Real Bodies* (Palgrave 2002). Her most recent research projects are about teenage pregnancy and abortion, and second trimester abortion (with colleagues from the University of Southampton), and about infant feeding (with Professor Frank Furedi, University of Kent). The results of these studies are published, to date, in the journals *International Journal of Law, Policy and the Family, Reproductive Health Matters, Health, Risk and Society,* and *Sociology of Health and Illness*. Ellie is the co-ordinator of Parenting Culture Studies www.parentingculturestudies.com

Joyce L. Marshall is a Lecturer at the University of York in the United Kingdom. She is public health researcher with a clinical background in midwifery. Her research has focused on maternal and child health, the use of knowledge in clinical practice, breastfeeding and knowledge and education.

Don Mathanga is a graduate of the College of Medicine, University of Malawi. He obtained his advanced training in epidemiology from the University of Michigan from which he received a PhD in 2004. His research interests include understanding the determinants of malaria risk and analysing programmatic efforts to link malaria interventions to other health programs. Currently, Don is the Director of Malaria Alert Centre and a senior lecturer at the College of Medicine, University of Malawi.

Helen L. McLachlan is a Senior Lecturer in Midwifery in the Division of Nursing and Midwifery and a Senior Research Fellow at Mother and Child Health Research, La Trobe University. She has a background as a clinical midwife and worked across the pregnancy, birth and postnatal spectrum. Her research interests include culture and childbirth, models of maternity care and breastfeeding. Her PhD thesis explored the views and experiences of women born in Turkey, Vietnam and Australia on giving birth in Australia.

Yuko Nakao is an Associate Professor in the School of Health Sciences, Nagasaki University, Japan. She teaches midwifery and perinatal care in the Department of Nursing. Her substantive interests include breastfeeding practice of mothers, breast care of lactation, feeding behavior of newborn infants and qualitative research methods in mother and child health.

Christopher Pell is currently a Research Fellow in the anthropology research group based in the Barcelona Centre for International Health (CRESIB). He has a MSc in the Anthropology and Ecology of Development and has worked for over 3 years in applied anthropological research, participating in multi-site projects based in several sub-Saharan African countries, such as the Acceptability of IPTi and the Social and Cultural Context of Malaria in Pregnancy. He has also been involved in qualitative health research in South America and Spain.

Robert Pool studied cultural anthropology at the University of Amsterdam, where he received a PhD in 1989. He has carried out ethnographic research on food taboos in India, local explanations of illness in Cameroon, and euthanasia decisions in the Netherlands. After spending 8 years in Tanzania and Uganda doing social scientific research relating to various aspects of HIV/AIDS, he moved to the London School of Hygiene and Tropical Medicine where he coordinated the medical anthropology course for 5 years and, as a member of the Gates Malaria Partnership, carried out research on the socio-cultural aspects of malaria in various African countries. He is currently a research professor at the Barcelona Centre for International Health Research (CRESIB) and professor of global health and inequality at the University of Amsterdam.

Laura Sikstrom is a doctoral student in medical anthropology at the University of Toronto. She worked as a research intern with the Soils, Food and Healthy Communities project from 2004 to 2005, during which time she was actively involved in the qualitative research about child feeding in the region. Laura will be conducting her doctoral research on paediatric HIV in northern Malawi.

Virginia Schmied is an Associate Professor at University of Western Sydney. She is a nurse and midwife with tertiary qualifications in sociology and women's studies. As a researcher, she has built a program of nursing and midwifery research using both quantitative and qualitative methodologies to study the transition to parenthood, childbirth and parenting programs, breastfeeding, supporting parents with infants in neonatal nurseries, models of midwifery care and postnatal care and the role of child and family health nurse.

Jane A. Scott is an Associate Professor. Her research has focused primarily on the epidemiology of breastfeeding, namely the determinants of breastfeeding initiation and duration. She has been principle or co- investigator on number of longitudinal infant feeding studies including the two Perth Infant Feeding studies conducted in 1992 and 2002, as well as the INFABIO study, a large multi-centre study funded by the European Union. She has also conducted a number of qualitative studies investigating the relationship of breastfeeding attitudes and outcome. She has authored

more than 50 refereed papers and has published her work in high-ranking international paediatric and nutrition journals including *Pediatrics*, *ActaPediatrica*, *Birth* and the *European Journal of Clinical Nutrition*.

Athena Sheehan is a Senior Lecturer at Avondale College, Australia. She is a nurse and midwife with a considerable research background. Her main research interests focus on infant feeding and support for women both during pregnancy and in the postnatal period. She has a particular interest in how professionals support women learning to breastfeed. Her PhD explored women's infant feeding experiences and decisions in the first 6 weeks post birth.

Lucy Thairu is a Postdoctoral Fellow in the Division of Infectious Diseases at Stanford University Medical School. Born and raised in Kenya, she studied Biochemistry in Nantes University in France, and completed a PhD in International Nutrition at Cornell University in the United States. Her research on breastfeeding and HIV has received several awards including the 2001 Abraham Horwitz award from the UN Committee on Nutrition.

Susanha Yimyam is an Associate Professor and a faculty member in OB-GYN Nursing of the Faculty of Nursing, Chiang Mai University Thailand. She obtained her PhD from the University of Melbourne Australia in 1997. She has conducted more than 20 research projects, mostly using combined (mixed) methods of qualitative and quantitative approaches. She was awarded as an excellent nursing researcher from the Thai Nursing Council in 2003. Her research interests include health care policy and health promotion in working women, breastfeeding, HIV/AIDS and infection control.

Contents

Contributors

Chiara Alfieri Institut de Recherche pour le Développement (UMR 145), Université Paul Cézanne d'Aix-Marseille, CReCSS/MMSH, 5 rue du Château de l'Horloge, 13100 Aix-en-Provence, France, ch.alfieri@gmail.com

Orit Avishai Fordham University, 407 Dealy Hall, Rose Hill Campus, Bronx, New York, NY 10458, USA, avishai@fordham.edu

Rachel Bezner Kerr Department of Geography, University of Western Ontario, SSC 2409, 1151 Richmond Street N., London, Ontario, Canada N6C 2B5, rbeznerkerr@gmail.com

Colin W. Binns School of Public Health, Curtin University of Technology, Perth, Western Australia, Australia 6848, cbinns@health.curtin.edu.au

Chris Cunningham Research Centre for Māori Health & Development, Massey University, PO Box 756, Wellington, New Zealand, cwcunningham@xtra.co.nz

Laifolo Dakishoni Soils, Food and Healthy Communities Project, Ekwendeni CCAP Hospital, PO Box 19, Ekwendeni, Malawi, dakishoni@yahoo.ca

Alice Desclaux Hôpital de Fann, Institut de Recherche pour le Développement (UMR 145), Université Paul Cézanne d'Aix-Marseille, BP 1386, 18524 Dakar, Sénégal, alice.desclaux@ird.fr

Tanya Doherty Health Systems Research Unit, Medical Research Council, Francie van Zyl Drive, Parrow, Cape Town, South Africa, tanya.doherty@mrc.ac.za

Dat Van Duong United Nations Population Fund in Vietnam, UN Apartment Building, 2E Van Phuc Compound, Kim Ma Street, Ba Dinh District, Hanoi, Vietnam, dat@unfpa.org.vn

Meliksah Ertem Department of Public Health, Faculty of Medicine, Dicle University, Diyarbakir, Turkey, mertem@dicle.edu.tr ; mertem85@hotmail.com

Della A. Forster Mother and Child Health Research, La Trobe University, Bundoora, Victoria, Australia 3086, d.forster@latrobe.edu.au

Caroline Jane Gatrell Department of Management Learning and Leadership, Lancaster University Management School, Lancaster University, Lancaster, LA1 4YX, UK, c.gatrell@lancaster.ac.uk

Marewa Glover Social & Community Health, School of Public Health, University of Auckland, Private Bag 92019, Auckland, New Zealand, m.glover@auckland.ac.nz

Mary Godfrey Leeds Institute of Health Sciences, University of Leeds, Charles Thackrah Building, 101 Clarendon Road, Leeds LS2 9LJ, UK, m.godfrey@leeds.ac.uk

Marjolein Gysels CRESIB (Barcelona Centre for International Health Research), Hospital Clinic – University of Barcelona, Rosselló 132, sobreático 1a., 08036 Barcelona, Spain, marjolein.gysels@cresib.cat

Gerd Holmboe-Ottesen Department of General Practice and Community Medicine, Faculty of Medicine, Institute of Health and Society, University of Oslo, P.O. Box 1130, Blindern 0318 Oslo, Norway, gerd.holmboe-ottesen@medisin.uio.no

Sumihisa Honda Department of Public Health, School of Medicine, Nagasaki University, Sakamoto, Nagasaki 852-8523, Japan, honda@nagasaki-u.ac.jp

Penjani Kamudoni Department of General Practice and Community Medicine, Faculty of Medicine, Institute of Health and Society, University of Oslo, P.O. Box 1130, Blindern, 0318 Oslo, Norway, p.r.kamudoni@medisin.uio.no/ penjanius@yahoo.com

Blessings Nyasilia Kaunda Malaria Alert Center (MAC), University of Malawi, Pvt Bag 360, Blantyre, Malawi, bkaunda@mac.medcol.mw

Somsri Kitisriworapan Kasetsart University's Demonstration School, Kasetsart University, Paholyotin Road, Bangkok 10900, Thailand, somsri_kus@hotmail.com

Ellie Lee University of Kent, Canterbury, Kent CT2 7NF, UK, e.j.lee@kent.ac.uk

Pranee Liamputtong School of Public Health, La Trobe University, Bundoora, Victoria, Australia 3086, pranee@latrobe.edu.au

Joyce L. Marshall Maternal and Child Health, University of Huddersfield, Harold Wilson Building, The University of Huddersfield, Queensgate, Huddersfield, HD1 3DH, joyce.marshall@hud.ac.uk

Don Mathanga Malaria Alert Centre (MAC), University of Malawi, Pvt Bag 360, Blantyre, Malawi, dmathang@mac.medcol.mw

Helen L. McLachlan Division of Nursing and Midwifery and Mother and Child Health Research, La Trobe University, Bundoora, Victoria, Australia 3086, h.mclachlan@latrobe.edu.au