

Fathers help to improve breastfeeding practice: can Indonesian fathers provide the same help?

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ABSTRACT

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The objectives of this paper are i) to explore factors influencing practices of timely breastfeeding initiation and exclusive breastfeeding with special attention on factors related to the roles of father; and ii) to elaborate possible factors influencing father's roles in breastfeeding based on literatures from the developed world. Studies conclude that father's roles in supporting breastfeeding include participation in decision on infant feeding mode, involvement in child care taking and household tasks, as well as being the protector and the family provider. They also explore that the quality of couple relationship, parental knowledge and attitudes, characteristics of parental function, and the burden on the family economy are barriers which discourage fathers from being supportive towards breastfeeding. Indonesian fathers may influence breastfeeding in the same way and also experience similar barriers. However, due to different exposure to norms, beliefs, and cultures, a specific study on this matter is very relevant to be carried out in Indonesia prior to any breastfeeding promotion targeted to fathers.

Keywords: *Breastfeeding initiation, exclusive breastfeeding, father's roles*

Peran ayah untuk meningkatkan praktek pemberian ASI: dapatkah ayah di Indonesia melakukannya?

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ABSTRAK

Makalah ini bertujuan untuk menggali literatur tentang i) faktor-faktor yang mempengaruhi inisiasi dini menyusui dan pemberian ASI eksklusif, terutama faktor yang berkaitan dengan peran ayah, dan ii) faktor-faktor yang mempengaruhi peran ayah tersebut. Studi-studi di negara maju menyimpulkan bahwa peran ayah dalam mendukung pemberian ASI mencakup keikutsertaannya dalam pengambilan keputusan untuk pola pemberian makan bayi, perawatan/pengasuhan bayi, pekerjaan rumah tangga, dan kegiatan sebagai pencari nafkah keluarga. Studi-studi lain juga dari negara maju menunjukkan bahwa kualitas kehidupan pernikahan, pengetahuan dan sikap, karakteristik *parenting*, dan beban ekonomi keluarga dapat menjadi kendala sehingga ayah tidak dapat memberikan dukungan yang semestinya terhadap pemberian ASI. Ayah di Indonesia mungkin dapat memberikan dukungan serupa terhadap pemberian ASI dan mengalami kendala yang mirip seperti yang dialami ayah di negara maju. Namun karena mereka dilingkupi oleh norma, kepercayaan, dan budaya yang berbeda, maka sebuah studi tentang peran ayah di Indonesia terhadap pemberian ASI sangat diperlukan.

Kata kunci: Inisiasi menyusui, pemberian ASI eksklusif, peran ayah

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INTRODUCTION

Based on World Health Organization (WHO)/United Nation Children's Fund (UNICEF),⁽¹⁾ the current recommendations on breastfeeding include the following key behaviors: i) early initiation of breastfeeding; ii) feeding of colostrum to the newborn; iii) exclusive breastfeeding for the first 0-6 months; and iv) continued breastfeeding through the second year. In response to the above global recommendation, this paper focuses on the elaboration of breastfeeding practices related to timely breastfeeding initiation and exclusive breastfeeding. With regards to breastfeeding initiation, WHO⁽²⁾ stated that mothers and infants should not be separated after birth unless there is an unavoidable medical reason.

Optimally the infant should be left with the mother continuously from birth, and allowed to attach spontaneously to the breast whenever he shows signs of readiness to do so. An arbitrary but practical minimum recommendation is for skin-to-skin contact to start within at most half-an-hour of birth and to continue for at least 30 minutes. Furthermore, WHO⁽³⁾ defines exclusively breastfed infants as those who have received only breast milk from the mother or a wet nurse, or expressed breast milk, and no other liquids or solids with the exception of drops or syrups consisting of vitamins, mineral supplements, or medicines.

In Indonesia, early breastfeeding initiation was practiced only among 8.3% of infants within 30 minutes after birth,⁽⁴⁾ 3.7-36% within

one hour,⁽⁵⁻⁶⁾ and 27.1% within one day after delivery.⁽⁵⁾ The data suggest that early breastfeeding initiation is not commonly practiced. The delay in starting breastfeeding immediately is an indication that some prelacteal feed is given during the period between birth and initiation of breastfeeding. Indonesian demographic and health survey in 2002-2003 found that the percentage of infants who received a prelacteal liquid was very high. As expected, infants were more likely to receive liquid than semi solid food before they are regularly breastfed 45% and 18% respectively.⁽⁵⁾ Furthermore, results of National Nutrition and Health Surveillance conducted by Helen Keller International/Indonesia found that in 2002 25% of the infants in Jakarta were exclusively breastfed for 1-3 months, 4% for 4-6 months and 1% for 5-6 months.⁽⁷⁾ A more recent data found that exclusive breastfeeding practiced until 4-6 months in Jakarta was 8.5%.⁽⁶⁾ This means that a higher proportion of infants aged below 6 months have been introduced to liquid, semi solid and/or solid foods other than breast milk. Furthermore, data from Indonesian Ministry of Health shows that the average age of Indonesian children given breast milk was 23.9 months.⁽⁴⁾ This is similar to the recommendation of the Innocenti Declaration⁽⁸⁾ to give breast milk to the children up to the age of 24 months. Other data reveals that although breastfeeding duration in general among Indonesian children was 22.3 months but it was only 14.4 months in DKI Jakarta.⁽⁵⁾ The data show that although breastfeeding is universally acknowledged as the most beneficial method of infant feeding and commonly practiced, breastfeeding practices as recommended (i.e. early breastfeeding initiation after birth, exclusive breastfeeding from birth until 6 months of age) are generally low.

These sub-optimal practices on the two key breastfeeding behaviors may reduce the

prominent benefits of breastfeeding for child optimal growth and survival. Such a benefit is reported that timely initiation of breastfeeding is considered crucial starting point for successful breastfeeding.⁽²⁾ Delayed breastfeeding initiation increased the risk of neonatal mortality due to hypothermia attributed from delayed skin-to-skin contact.⁽⁹⁾ Delayed skin contact may also increase the risk of experiencing nosocomial infections among infants.⁽¹⁰⁾ Early initiation is likely to be associated with a longer duration of exclusive breastfeeding and also longer duration of breastfeeding in general.⁽¹¹⁾ Introduction of liquid, semi solid and/or solid foods before the infant reaches the age of 6 months has been proven to have effect on lower growth,⁽¹²⁾ increase incidence and/or severity of a wide range of infectious diseases such as diarrhea⁽¹³⁾ and respiratory tract infection.⁽¹⁴⁾ Breastfeeding also reduces risk of childhood obesity.⁽¹⁵⁾

In short, benefits of breastfeeding are outstanding. While this understanding is fundamental to address the high public health significance resulted from a simple and natural practice such as breastfeeding, many studies found that simply understanding the benefits of breastfeeding is not convincing enough to encourage nursing mothers to perform breastfeeding practices as recommended. This is due to the fact that factors influencing breastfeeding practices are multifaceted. And therefore, this paper's objective is to explore factors influencing practices of timely breastfeeding initiation and exclusive breastfeeding with special attention on factors related to the roles of father. This paper also elaborates possible factors influencing father's roles in breastfeeding based on literatures from the developed world. The information presented in this paper may be useful to portray the possible roles of Indonesian fathers in supporting breastfeeding.

Factors influencing timely breastfeeding initiation and exclusive breastfeeding practices: do fathers have influence on these practices?

Delayed initiation of breastfeeding is directly related to lack of antenatal exposure,⁽²⁾ inappropriate attitudes and practice of health personnel,^(2,16-17) unfriendly policy at hospital/clinic setting to breastfeeding practice⁽²⁾ including marketing of breast milk substitutes at maternity hospital/clinic.⁽⁵⁾ Improper social influences from the family, peer, and community shape the innate intention of the mothers for not breastfeeding,⁽¹⁰⁾ thus hindering timely initiation of breastfeeding.

Furthermore, factors associated with exclusivity and duration of breastfeeding include poor knowledge and lack of mother's confidence,⁽¹⁷⁻¹⁸⁾ inadequate skills of appropriate breastfeeding techniques (i.e. positioning, latching on) and management of common problems during lactation (i.e. breast engorgement, perception of insufficient breast milk, sore nipple, etc),⁽¹⁹⁻²⁰⁾ lack of physical and psychological supports received during lactation period (i.e. from family members, peer, health professionals),^(10,21-22) use of teats or pacifiers,^(2,23) maternal employment,^(17,24) exposure from various sources of information,⁽²⁵⁾ inappropriate culture and norms regarding exclusive breastfeeding among the family members, peer, and society.^(17,26)

Data from the developed world state that most women who decide to breastfeed make this decision before or early in pregnancy.⁽²⁷⁾ Moreover, breastfeeding plans described by the mother at the time of delivery were significantly associated with the duration of breastfeeding.⁽²³⁾ Time of planning to breastfeed does not seem to be an issue in Indonesia since breastfeeding has always been regarded as a normative act. However, other factors may have played greater

roles in influencing Indonesian nursing mothers to practice breastfeeding as recommended. Nurses/midwives,^(17,22) family members,^(17,28) and partner's views^(17-19,27,29) were important influences for both breastfeeding initiation and continued breastfeeding. The latter influence is less elaborated in the Indonesian context even though Lawrence and Lawrence⁽¹⁰⁾ states that breastfeeding as any other types of child caring has been acknowledged as a triadic relationship among mother, father and the infant. Some observational studies confirm this fact that father is one of the key influences in breastfeeding.⁽³⁰⁻³¹⁾ Furthermore, studies also conclude the influence of father particularly on breastfeeding decision,⁽¹⁸⁾ breastfeeding initiation,^(29,32) also duration and exclusivity of breastfeeding^(24,33) and a risk factor for bottle feeding.^(17,30) Based on father's participation in the decision to breastfeed and their involvement in caretaking, that there are four styles of fathering i.e. involved, assistor, supervisor, and detached. Involved fathers participate actively in the decision to breastfeed and in caring for their children. Assistor fathers follow their wives' lead regarding breastfeeding and they are actively involved in care taking. Supervisor fathers are involved with the breastfeeding decision and they provide little child care or household help. Detached fathers are not involved in child care or the breastfeeding decision.⁽³⁴⁾

Exclusive breastfeeding in which its success is influenced by timely initiation of breastfeeding⁽¹¹⁾ is considered time demanding by the nursing mothers,⁽²¹⁾ thus women need supporters during postpartum period. Right after delivery, support from health provider for early breastfeeding initiation is significant.⁽²⁾ At this point, fathers or other family members who accompany the mothers during delivery inside or outside the delivery room may provide a source of emotional support. Although such a practice is getting common recently among

Indonesian fathers,⁽³⁵⁾ information on its effect to the mother psychological state, thus to timely breastfeeding initiation is lacking. Furthermore, a hypothesis on this regard may be addressed in such a way that fathers with appropriate knowledge and attitude on the importance of timely breastfeeding initiation would be able to influence the hospital setting by directly asking for the rights of the newborn baby to be immediately fed with the mother's breast milk. Furthermore, many studies have reported type of roles the nursing fathers can provide for supporting exclusive breastfeeding immediately after the birth of the infant up to the age of 6 months and supporting any breastfeeding practices. These include paternal participation in decision on infant feeding mode³⁴ and involvement in child care taking.^(24,29,34,36) Child care includes developing comforting skills for the infant such as stroking, holding, carrying, cuddling,⁽¹⁰⁾ changing baby's diaper and less night sleep⁽³⁷⁾ caring for the infant when the mother works outside home⁽²⁴⁾ and involvement in infant feeding i.e. help mother express the breast milk, store it and feed it to the infant.^(29,38) Additionally, paternal roles are also identified within the family economy as they are the protector and the bread winner,⁽³⁶⁾ also provider of good nutrition for the breastfeeding mothers,⁽²⁴⁾ and assistance for some forms of household tasks.^(6,39) Other roles of fathers are related to couple (i.e. husband-wife) functions which include nurturance of marital relationship based on the satisfaction of a couple's objective and subjective needs with the provision of mutual support aimed at personal development (friendship), partnership in daily responsibilities and tasks (fellowship), and an affective and sexual relationship (love relationship).^(33,39) Conflicting couple's relationship and parental function as well as lack of paternal knowledge may predispose fathers to suggest bottle feeding to the nursing mothers.^(17,30)

A study among low income fathers and nursing mothers in USA found that father's roles in infant feeding include father involvement in feeding of expressed breast milk.²⁹ This may be caused by the fact that fathers want to build closeness with the infant, and furthermore it is felt hurtful by the fathers to know that they can not duplicate the comfort the mother can provide to the infant while breastfeeding. This issue may not yet be the case felt by the Indonesian fathers. However, it is very relevant to explore father's feeling of jealousy towards the mother and/or the infant. Furthermore, such issues about expressed breast milk for infants whose mothers return to work or are away also need further investigation among Indonesian fathers. Norms and beliefs related to feeding the infant not directly from the mother's breasts may or may not be favorable in this setting.

The magnitude of male's involvement specifically in pregnancy care is reported in the 2002-2003 Indonesian Demography and Health Survey (IDHS) in which currently married men who have had at least one child were asked about pregnancy care of the mother of the last-born child and the health care of the child. Findings in DKI Jakarta province show that during their wife's last pregnancy, 48% of fathers talked to a health care provider about the pregnancy care and health of their wife. Of these men, 45% talked with a health care provider about the types of foods his wife should eat during pregnancy, 46% talked about how much rest she should have during pregnancy, and 44% talked about types of health problems for which she should get immediate medical attention. Fathers in their thirties live in urban areas, and those who are better educated are more likely than other fathers to talk with a health care provider about their wife's health and care during pregnancy.⁽⁵⁾ While breastfeeding should be prepared long enough during pregnancy, the IDHS data show that breastfeeding topics were less discussed with the

fathers during antenatal visits. Although many studies conclude the need to include fathers during antenatal counseling for influencing breastfeeding initiation and duration, it is substantial to investigate further the influence of paternal involvement during antenatal care to breastfeeding practices in Indonesia.

Factors influencing father's roles in breastfeeding

A growing concern on father's roles in breastfeeding is closely related to a deeper understanding on the challenges in fathering. Over the last 30 years, fathers' roles in caring for their children have been expanded by rapid and profound socioeconomic changes and by society's evolving perceptions and expectations of fathers' roles.⁽⁴⁰⁾ The dramatic movements of childbearing-aged women into workforce, the softening of sexual stereotypes after the achievements of the women's movement, and expressed longing among men for deeper meaning in their lives have brought men into close contact with their infants. Fathering, as with mothering, exists simultaneously for the infant and the family.⁽⁴¹⁾ This implies that parenting is equal for women and men. There are complementary activities for fathers and mothers. Parents are not equally able to do all things. The stress placed on sharing responsibilities of parenthood implies an across-the-board division of labor. There is more to nurturing the infant than to feeding. The father therefore should play a very significant role with the infant. For instance, when the infant is fussy and does not need to be fed, comforting is often best done by the father. Nonnutritive cuddling is best done by the father.⁽¹⁰⁾ In the United States, father means more than "wage earner" or "provider" and now can include stay-at-home dad, caregiver of child and sharer of child care responsibilities.⁽⁴⁰⁾ In Indonesian context, these phenomena seem to be emerging. A limited study

among patrilineal and matrilineal families of rural households in Indonesia found that 21% and 30% of fathers respectively were identified to take important roles in child caring responsibilities especially among those who live as nuclear families.⁽⁴²⁾ Due to the economic burden, more women now are working. This leaves the consequence that father's roles in child caring are expected to be more substantial.

A review on the parenthood experiences during the child's first year concluded that mothers felt satisfied and confident as a mother, are overwhelmed and drained for being primarily responsible for the child, struggled with the limited time available for herself and that fathers felt confident as a father and as a partner, drained with the new demands in life, are hurtful for being prevented from achieving closeness to the child, and being the protector and the primary provider of the family.⁽³⁶⁾ As such, Pruett⁽⁴¹⁾ states that parenthood is influenced first by past experience, spousal expectations, economics, personal and marital values and behaviors. A review study on supporting the father whose infant is being breastfed concluded that the quality of adult couple's relationship is an important predictor of breastfeeding success because the foundational relationship in the family is the adult relationship between the mother and the father.^(39,43) A study by Falceto et al⁽³³⁾ found that a good couple relationship was associated with more paternal breastfeeding support and involvement in infant's care but not in the breastfeeding practice. This finding is inconsistent with Sullivan et al.⁽³⁹⁾ This is probably because Falceto⁽³³⁾ included both couple's function and parental function into couple's relationship and Sullivan⁽³⁹⁾ categorized husband-wife interaction for couple's relationship. An earlier study used a qualitative study to explore the experiences of 10 Canadian fathers in dual-earner families after birth of their first infants in terms of redefining their roles as

spouses, workers, and fathers. The study found that the fathers' experiences consisted of coping with many demands from children, partners, and jobs. These men redefined their roles as fathers after their partners returned to full-time employment.⁽⁴⁴⁾ In addition, a study in Australia found that although rewarding, fathers found new or expanding fatherhood to be a significant challenge and time of change. Major themes included making a commitment, taking responsibility, negotiating responsibilities, developing and maintaining relationships, maintaining family integrity, balancing activities, and perceiving the self as father. Work had a major impact on fathers' ability to participate with their family and newborn. To manage, fathers sought to balance the demands of work and home, deal with stressors, manage their time, develop routines, and reprioritize. Fathers developed a sense of themselves as fathers over time, building confidence and deriving satisfaction from their fathering role. A range of competing factors affected fathers' ability to participate in the home with their newborn in the early weeks after birth.⁽⁴⁵⁾

Furthermore, a qualitative study among midwives and nursing mothers in North Jakarta reveals that fathers had strong influence in early introduction of formula milk as a result of father's being unconfident to the sufficiency of the mother's breast milk and having improper perception towards baby's cry. Mothers who felt afraid of his command finally complied by supplementing breast milk with formula milk.⁽¹⁷⁾ These suggest that fathers should also be the target for exposure to appropriate knowledge about breastfeeding and practical skill on how to overcome its difficulties when occur.

In response to the above rationale, an observational study targeted to fathers and nursing mothers in South Jakarta is currently in progress with the objectives of i) investigating father's roles which are most influential to

support timely breastfeeding initiation and exclusive breastfeeding practices; and ii) exploring its determinant factors that include quality of couple relationship, parental knowledge and attitudes, characteristics of parental function, and socio-economic factors.

Lessons learned from the Interventions Involving Fathers in the developed world

Interventions directly targeted to fathers have been initiated in some developed countries^(32,38,46-48) as presented in Table 1. In summary, the experiences reflect some interesting strategies on how to approach the Western fathers. Each has its own challenges. However, these interventions were mainly addressed to raise awareness and improve knowledge related to breastfeeding techniques and benefits to male target audiences. Except a study in Italy which involved fathers to help manage common lactation-related problems encountered by their female partners,⁽³⁸⁾ exploration on what specific support a father should provide to the nursing mother and the infant during lactation period is not yet well addressed. Likewise, a proper understanding on factors influencing father's roles in supporting or not supporting breastfeeding practices must be addressed proportionally in order to match with the actual context of the father's capacity since at the same time they are expected to providing various roles as parent, husband, and bread winner. If we are to copy the lessons learned from the existing interventions, a careful assessment and judgment on the used approaches should be in place for ensuring the acceptability and applicability of the approach in Indonesia setting. Approaching Indonesian fathers may be even more challenging especially when issue to be discussed is related to child caring an issue which is probably still considered as outside of their "domain".

Table 1. The summary of some interventions involving fathers

Study site	Characteristics of the subjects	Study objective	Methods	Breastfeeding outcome	Key findings
Baltimore, USA ⁽²³⁾	Expectant fathers (n=59) which were approached from the 1 st pregnant partners	To test the effectiveness of a simple educational intervention that was designed to encourage fathers to advocate for breastfeeding and to assist his partner if she chooses to breastfeed	<ul style="list-style-type: none"> Randomized controlled trial of 2 groups: a 2-hour intervention class on infant care and breastfeeding promotion (intervention) and a class on infant care only (control) held every 2 weeks. The classes were led by a peer-educator, were interactive and informal and utilized different media to create an accessible environment for participants. Mothers were surveyed by telephone during 2, 4, and 8 weeks after delivery. 	Initiation and duration of breastfeeding	Breastfeeding was initiated by 74% of women whose partners attended the intervention class as compared with 41% of women whose partners attended the control class (p=0.02).
Naples, Italy ⁽²⁴⁾	Mother and father pairs (n=140 each group) of healthy, term, normal birth weight infants	To investigate whether fathers to recognize the relevance of their role in the success of breastfeeding and prevent and to manage the most common lactation problems would result in more women breastfeeding	<ul style="list-style-type: none"> Control trial: fathers of infants born in October - November 2002 (intervention) versus December 2002 - January 2003 (control). Method: face-to-face 40-minute session in two months with a leaflet at the end of the session. The topics were infant feeding and lactation problems (intervention) and child care (control). Main points discussed with the fathers of intervention group: <ul style="list-style-type: none"> The main concerns of the fathers about breastfeeding, jealousy, diminished relationship with the mate, feeling left out of feeding the infant How to reinforce the confidence of the mother What to do when the infant refuses the breast How to manage sore and inverted nipples, breast engorgement, and mastitis How to express the milk 	Full breastfeeding at 6 months	<p>The prevalence of full breastfeeding at 6 months was 25% (35 of 140) in the intervention group and 15% (21 of 140) in the control group. Moreover, significantly more women in the intervention group reported receiving support and relevant help with infant feeding management from their partners (128 [91%] of 140 versus 48 [34%] of 140).</p> <p>Among the women who had reported difficulties with lactation in the intervention and control groups (96 [69%] and 89 [64%], respectively), the prevalence of full breastfeeding at 6 months was 24% and 4.5%, respectively.</p>
Los Angeles, USA ⁽²⁵⁾	Male employees at the Los Angeles Department of Water and Power	To promote breastfeeding through male employees	<ul style="list-style-type: none"> A corporate lactation program that focuses on promoting breastfeeding through male employees Since 1990, a full-time on-site lactation program has been offered to male employees at the Los Angeles Department of Water and Power (a public utility company) 	Breastfeeding in general	<p>The success is reflected in the increased participation rate of the male employees (35% in 1995 to 40% in 1996).</p> <p>The average length of breastfeeding for all of the infants whose fathers participated in the program was 8 months; 69% of women, a majority of them employed, were still breastfeeding at 6 months.</p>
Bristol, UK ⁽²⁶⁾	Ten grandmothers and 5 fathers in focus groups and interviews were involved in the preliminary study. As many as 29 families were involved in the intervention.	<ul style="list-style-type: none"> To assess fathers' and grandmothers' ability to support successful breastfeeding To design a suitable intervention for fathers and grandmothers To assess the acceptability and feasibility of the intervention 	<ul style="list-style-type: none"> Part 1: Assessing background knowledge using qualitative focus groups and interviews. Part 2: Intervention: an antenatal intervention using a leaflet based on findings from part 1, done by one research midwife, delivered at around 36 weeks gestation. There was no control group, but compared with the wider population. Part 3: Postnatal interviews consisted of breastfeeding rates of the intervention group, antenatal to postnatal changes in levels of social support for each mother, differences between breast feeders and bottle feeders. 	Breastfeeding in general	<p>The importance of fathers and grandmothers in providing emotional and practical support for breastfeeding mothers is highlighted, since those who were still breastfeeding at 8 weeks all felt that they were receiving similar or better</p>

In this regard, relationship between Indonesian fathers and mothers may be worth investigating since this is relevant for understanding flow of communication and path of decision making among Indonesian couples. Then, this information can be used to decide whether fathers may be well approached through the mothers or it is the other way around.

CONCLUSIONS

Interestingly, studies in the developed countries confirm that there are barriers which hinder fathers from being supportive towards breastfeeding practice. These barriers include the quality of couple relationship, parental knowledge and attitudes, characteristics of parental function, and the burden on the family economy. Indonesian fathers may be able to provide similar supports as provided by their Western counterparts. However, type of father's support expected by the Indonesian mothers for influencing the breastfeeding practices should be explored. As such, a careful analysis on the barriers encountered by the Indonesian fathers should be done as they may be different from those experienced by the Westerners. This is due to the fact that norms and beliefs as well as prevailing cultures in Indonesian society are of course - different from those of the Western society and known to strongly influence someone's actual actions. Therefore, it is crucial to investigate types of father's roles that are strategically influencing breastfeeding practice and at the same time to explore types of father's roles that match with the actual context of the father's capacity as a father, a husband, and the bread winner of the family.

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References

1. WHO/UNICEF. Global strategy for infant and young child feeding. Geneva, Switzerland: WHO; 2003.
2. World Health Organization. Evidence for the Ten Steps to Successful Breastfeeding. Geneva, Switzerland: Family and reproductive health, Division of child health and development, WHO; 1998.
3. World Health Organization. Indicators for assessing breastfeeding practices. Geneva, Switzerland: Division of Child Health and Development, WHO; 1991.
4. Directorate of Community Nutrition. Gizi dalam angka sampai tahun 2002. (Nutrition in Numbers until Year 2002). Jakarta: Directorate of Community Nutrition, Ministry of Health Republic of Indonesia; 2003.
5. Badan Pusat Statistik, ORC Macro. Indonesia Demographic and Health Survey 2002-2003. Calverton, Maryland, USA: BPS and ORC Macro; 2003.
6. DKI Jakarta Provincial Health Office. Survey cepat cakupan ASI eksklusif di Jakarta. (Rapid survey on exclusive breastfeeding rate in Jakarta). Jakarta: DKI Jakarta Provincial Health Office; 2005.
7. De Pee S, Diekhans J, Stallkamp G, Kiess L, Moench-Pfanner R, Martini E, et al. Breastfeeding and complementary feeding practices in Indonesia. Nutrition and Health Surveillance System Annual Report 2002. Jakarta: Helen Keller Worldwide; 2002.
8. WHO/UNICEF. Innocenti Declaration on the protection, promotion, and support of breastfeeding. Florence, Italy: WHO/UNICEF, 1990.
9. Edmond KM, Zandoh C, Quigley MA, Amenga-Etego S, Owusu-Agyei S, Kirkwood BR. Delayed breastfeeding initiation increases risk of neonatal mortality. *Pediatrics* 2006; 117: 380-6. Available at <http://www.pediatrics.org/cgi/content/full/117/3/e380>. Accessed March 30, 2006.
10. Lawrence RA, Lawrence RM. Breastfeeding: A guide for the medical profession. 6th edition. Philadelphia, USA: Mosby Inc.; 2005.
11. León-Cava N, Lutter C, Ross J, Martin L. Quantifying the benefits of breastfeeding: a

- summary of the evidence. Washington DC, USA: Food and Nutrition Program/Health Promotion and Protection Division, Pan American Health Organization (PAHO); 2002.
12. Le TH, Gross R, Giay T, Sastroamidjojo S, Schultink W, Nguyen TL. Premature complementary feeding is associated with poorer growth of Vietnamese children. *J Nutr* 2000; 130: 2683-90.
 13. Kramer MS, Guo T, Platt RW, Sevkovskaya Z, Dzikovich I, Collet JP et al. Infant growth and health outcomes associated with 3 compared with 6 mo of exclusive breastfeeding. *Am J Clin Nutr* 2003; 78: 291-5. Available at <http://www.ajcn.org>. Accessed March 22, 2006.
 14. The American Academy of Pediatrics. Policy statement: breastfeeding and the use of human milk. *Pediatrics* 2005; 115: 496-506. Available at <http://pediatrics.aappublications.org/cgi/content/full/115/2/496>. Accessed October 31, 2005.
 15. Bogen DL, Hanusa BH, Whitaker RC. The effect of breastfeeding with and without formula use on the risk of obesity at 4 years of age. *Obes Res* 2004; 12: 1527-35.
 16. Taveras EM, AM Capra, PA Bravemen, NG Jensvold, GJ Escobar, TALieu. Clinicians support and psychosocial risk factors associated with breastfeeding discontinuation. *Pediatrics* 2003; 112: 108-15.
 17. Septiari AM, Februhartanty J, Bardosono S. Practice and attitude of midwives towards the current exclusive breastfeeding policy until 6 months: A qualitative study in North Jakarta. Thesis. Jakarta: SEAMEO-TROPMED Regional Center for Community Nutrition, University of Indonesia; 2006.
 18. Arora S, McJunkin C, Wehrer J, Kuhn P. Major factors influencing breastfeeding rates: mother's perception of father's attitude and milk supply. *Pediatrics* 2000; 106: 67-DOI: 10.1542/peds.106.5.e67. Available at <http://www.pediatrics.org/cgi/content/full/106/5/e67>. Accessed May 29, 2006.
 19. Giugliani ERJ. Common problems during lactation and their management. *J Pediatr (Rio J)* 2004; 80: S147-54.
 20. Februhartanty J, Bardosono S, Septiari AM. Problems during lactation are associated with exclusive breastfeeding in DKI Jakarta Province: father's potential roles in helping to manage these problems. *Mal J Nutr* 2006; 12: 167-80.
 21. Green CP. Improving breastfeeding behaviors: Evidence from two decades of intervention research. Washington DC, USA: LINKAGES Project; 1999.
 22. Taveras EM, Li R, Grummer-Strawn L, Richardson M, Marshall R, Rego VH, et al. Opinion and practices of clinicians associated with continuation of exclusive breastfeeding. *Pediatrics* 2004; 113: 283-90. Available at <http://www.pediatrics.org/cgi/content/full/113/4/e283>. Accessed September 5, 2006.
 23. Vogel A, Hutchinson BL, Mitchell EA. Factors associated with the duration of breastfeeding. *Acta Pædiatr* 1999; 88: 1320-6.
 24. Dearden KA, Le NQ, Mai D, Marsh DR, Pachün H, Schroeder DG, et al. Work outside the home is the primary barrier to exclusive breastfeeding in rural Viet Nam: Insights from mothers who exclusively breastfed and worked. *F Nutr Bull* 2002; 23: 99-106.
 25. Abdullah S, Hastuti D, Sumarwan U. Pengambilan keputusan pemberian ASI eksklusif kepada bayi di kota Bogor. (Decision making in exclusive breastfeeding to infants in Bogor). *Media Gizi Keluarga* 2004; 28: 70-7. (In Indonesian).
 26. Abada TSJ, Trovato F, Lalu N. Determinants of breastfeeding in the Philippines: a survival analysis. *Soc Sci Med* 2001; 52: 71-81.
 27. Earle S. Factors affecting the initiation of breastfeeding: Implication for breastfeeding promotion. *Health Prom Intl* 2002; 17: 205-14.
 28. Libbus K, Bush TA, Hockman NM. Breastfeeding beliefs of low-income primigravidae. *Int J Nurs Stud* 1997; 34: 144-50.
 29. Schmidt MM, Sigman-Grant M. Perspectives of low-income fathers' support of breastfeeding: an exploratory study. *JNE* 1999; 31: 31-7.
 30. Bar-Yam NB, Darby L. Fathers and breastfeeding: a review of literature. *J Hum Lact* 1997; 13: 45-50.
 31. Bentley ME, Caulfield LE, Gross SM, Bronner Y, Jensen J, Kessler LA, et al. Source of influence on intention to breastfeed among African-American women at entry to WIC. *J Hum Lact* 1999; 15: 27-34.
 32. Wolfberg AJ, Michels KB, Shields W, O'Campo P, Bronner Y, Bienstock J. Dads as breastfeeding advocates: results of a randomized controlled trial of an educational intervention. *Am J Obstet Gynecol* 2004; 191: 708-12.
 33. Falceto OG, Giugliani ERJ, Fernandes CLC. Couples relationships and breastfeeding: Is there an association? *J Hum Lact* 2004; 20: 46-55.

34. Gamble D, Morse J. Fathers of breastfed infants. *JOGNN* 1993; 22: 358-365. Cited by: Bar-Yam NB, Darby L. Fathers and breastfeeding: a review of literature. *J Hum Lact* 1995; 13: 45-50.
35. Sood S, Chandra U, Palmer A, Molyneux I. Measuring the effects of the SIAGA behavior change campaign in Indonesia with population-based survey results. Maryland, USA: JHPIEGO; 2004.
36. Nystrom K, Ohrling K. Parenthood experiences during the child's first year: literature review. *J Adv Nurs* 2004; 46: 319-30.
37. Gay CL, Lee KA, and Lee SY. Sleep patterns and fatigue in new mothers and fathers. *Biol Res Nurs* 2004; 5: 311-8.
38. Pisacane A, Continisio GI, Aldinucci M, D'Amora S, Continisio P. A controlled trial of father's role in breastfeeding promotion. Electronic article. *Pediatrics* 2005; 116: 494-8. Available at <http://www.pediatrics.aappublications.org/cgi/content/full/116/4/e494>. Accessed Oktober 31, 2005.
39. Sullivan ML, Leathers SJ, Kelley MA. Family characteristics associated with duration of breastfeeding during early infancy among primiparas. *J Hum Lact* 2004; 20: 196-205.
40. Coleman WL, Garfield C. Committee on Psychosocial Aspects of Child and Family Health. Fathers and Pediatricians: Enhancing men's roles in the care and development of their children. *Pediatrics* 2004; 113: 1406-11. Available at <http://www.pediatrics.org/cgi/content/full/113/5/1406>. Accessed August 7, 2006.
41. Pruett KD. Role of the father. *Pediatrics* 1998; 102: 1253-61. Available at <http://www.pediatrics.org/cgi/content/full/102/5/SE1/1253>. Accessed October 18, 2006.
42. Februhartanty J, Fransisca DO, Roshita A, Fahmida U, Dianawati E. Childcare of children under three years old in patrilineal and matrilineal families: A study among Karo and Minangkabau households. Research Report. Jakarta, Indonesia: SEAMEO-TROPMED RCCN-UI; 2005.
43. Jordan PL, Wall VR. Supporting the father when an infant is breastfed. *J Hum Lact* 1993; 9: 31-4.
44. Hall WA. New fatherhood: myths and realities. *Public Health Nurs* 1994; 11: 219-28.
45. St John W, Cameron C, McVeigh C. Meeting the challenges of new fatherhood during the early weeks. *J Obstet Gynecol Neonatal Nurs* 2005; 34: 180-9.
46. Cohen R, Lange L, Slusser W. A description of a male-focused breastfeeding promotion corporate lactation program. *J Hum Lact* 2002; 18: 61-5.
47. Ingram J, Johnson D. A feasibility study of an intervention to enhance family support for breastfeeding in a deprived area in Bristol, UK. *Midwifery* 2004; 20: 367-79.
48. Stremmler J, Lovera D. Insight from a breastfeeding peer support pilot program for husbands and fathers of Texas WIC participants. *J Hum Lact* 2004; 20: 417-22.