

MOTHERS' BREASTFEEDING PRACTICES AND SELF-EFFICACY

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Abstract

This study examined breastfeeding practices and self-efficacy among mothers residing in rural areas. A cross-sectional study was conducted for 104 mothers via purposeful sampling in a Posyandu (maternal and child health service) in Kampar district, one of the rural areas in Riau, Indonesia. The Breastfeeding Self-Efficacy Scale Short Form (BSES-SF) was used in the questionnaires to collect data. Chi-square test was used for bivariate analysis. Majority of the respondents (71.2%) were 20–35 years old; 69.3% of the respondents' level of education were low (such as junior and senior high school levels). Approximately 91.3% of them were housewives. Exclusive breastfeeding prevalence was only 30.8%, with insufficient milk being the most common reasons cited by the mothers as failure to breastfeed exclusively. Porridge and mineral water were the most commonly supplied food given to babies under 6 months among 31.7% and 36.5% mothers, respectively. The respondents faced some breast problems, where 72.1% mothers did not have good breastfeeding skills. Approximately 59.6% mothers had higher breastfeeding self-efficacy than the mean score for BSES-SF, which was 58.58 (11.58 standard deviation [SD]). Mothers' age was significantly correlated with the BSES among mothers ($p < 0.01$). Increasing young mother's breastfeeding self-efficacy during the antenatal care period is important to lower these young mothers' perception of having insufficient milk.

Keywords: breastfeeding practice, mothers, breastfeeding self-efficacy

Abstrak

Praktik Menyusui dan Efikasi Diri Ibu. Penelitian ini bertujuan untuk menggambarkan tentang praktik pemberian air susu ibu (ASI) dan efikasi diri ibu menyusui di daerah pedesaan. Penelitian ini menggunakan pendekatan cross sectional pada 104 ibu yang berkunjung ke Posyandu sebagai tempat pos kesehatan untuk ibu dan anak yang diambil menggunakan teknik purposeful sampling. Alat pengumpulan data menggunakan kuisioner breastfeeding self-efficacy Scale Short Form (BSES -SF) yang telah valid dan reliabel pada penelitian sebelumnya. Analisis Chi square digunakan pada analisa bivariate. Mayoritas usia responden adalah berada pada rentang 20-35 tahun (71,2%) dengan pendidikan yang terbanyak adalah sekolah menengah pertama dan atas (69,3%). Hampir seluruh responden tidak memiliki pekerjaan diluar rumah (91,3%). Hanya 30,8% ibu memberikan ASI saja dengan alasan utama ASI yang tidak cukup sebagai alasan utama. Sebagai alternatif maka ibu memberikan bubur dan air putih sebagai makanan utama kepada bayi sebelum berusia 6 bulan. Kebanyakan ibu mengalami masalah dalam menyusui dan hanya 27,9% ibu memiliki kemampuan yang tepat dalam menyusui. 59,6% efikasi diri ibu menyusui di atas mean efikasi diri responden (58,58, SD 11,58). Usia ibu signifikan berhubungan dengan efikasi diri ibu menyusui ($p < 0,01$). Perlu ditingkatkan efikasi diri pada ibu muda selama masa kehamilan agar persepsi ibu tentang kecukupan ASI menjadi lebih baik.

Kata Kunci: efikasi diri, ibu, praktik menyusui

Introduction

Breast milk is considered the best food for babies and provided many short- and long-term benefits for the growth and development of baby. Breast milk increases the immune system of a baby, which can protect the baby from va-

rious diseases, reduce the infant mortality rate, and accelerate illness recovery (Maryunani, 2015; Duijts, 2010).

Breastfeeding prevent gastrointestinal diseases (Kramer & Kakuma, 2012), including young children allergies, reduces the infant mortality

incidence, and overweight and obesity risk from early period until adolescents (Bernardo et al., 2013). WHO suggests exclusive breastfeeding (EBF) from infancy to 6 months old and to continue breastfeeding until 2 years old and beyond (WHO, 2011). EBF means that a baby is breastfed as early as possible after delivery without schedule and given no other food even water until the baby is 6 months old. Providing additional food before the first 6 months of baby age is 1.94 times more likely to lead to an underweight toddler than EBF (Agrina et al., 2017). Although breast milk is the appropriate food for babies, EBF practices before 6 months of life are not popular among mothers, and WHO recommendation has yet to be realized.

The WHO is targeting an EBF coverage of 60% until 2030 (WHO, 2017). EBF coverage is globally low; it is only 40% and the EBF rate is also still low in several nations including developing countries. In these countries, only 38% of infants are exclusively breastfed during the first 6 months of age, and most of these mothers provide complementary food for their babies during this period (UNICEF, 2015).

Several factors are correlated with these issues as reported in some studies, such as mothers assuming that their breast milk is insufficient, mothers thinking that their infants might not be satisfied by EBF, and mothers feeling that their babies are still hungry (Lou et al., 2014; Robert et al., 2014). These perceptions contribute to premature supplementation of breastfeeding before 6 months. Breastfeeding self-efficacy (BSE) is defined as a mother's confidence in her ability to breastfeed her babies (Dennis & Faux, 1999). BSE is a mother's belief in her ability to decide on certain actions and achieve certain results (Meedya, Fahy, & Kable, 2010). Self-efficacy is useful to predict initiation and behavior of breastfeeding, and it can be the deciding factor in breastfeeding success (Tuthill et al., 2016).

Indonesia as a developing country also has the same concerns where its EBF rate is still lower than the target set by the Ministry of Health (Mi-

nistry of Health Republic of Indonesia, 2013). In developing countries, breastfeeding practices among mothers are influenced by sociodemographic characteristics, culture, and factors of health. Most mothers discontinue practicing EBF because of insufficient breast milk perceptions (Vygen et al., 2013; Balogun et al., 2015). In a previous study in Pekanbaru, an urban area in Indonesia, by Agrina et al. (2015) showed that most of mothers provide complementary foods for their babies before 6 months because the mothers think their breast milk is not enough for their baby. Non-EBF mothers tend to have the perception that breastfeeding alone is not enough to meet the needs of infants. Breastfeeding mothers with this perception typically lack knowledge on breastfeeding, so these mothers think their babies are still hungry. Their wrong perception about breastfeeding contributes to their lack of confidence to give breast milk. These studies proved that BSE is a significant variable correlated with positive breastfeeding effects among breastfeeding mothers. BSE indicates confidence to breastfeed. It is also a person's belief in her ability to decide on certain actions and do something to achieve certain results (Meedya et al., 2010). However, studies on BSE among rural mothers in Indonesia are lacking. Thus, this study aimed to examine sociodemographic characteristics, breastfeeding practices, and BSE among mothers in rural areas in Riau, Indonesia.

Methods

This research was a cross-sectional study carried out in June 2018 in East Kampar, a rural area in Riau, Indonesia. East Kampar is an agricultural area of Kampar district. A total of 104 eligible mothers were selected as samples via purposeful sampling technique; these women visited Posyandu as a health post for maternity and child health care in Indonesia. The sample size in this study was estimated using 95% confidence interval.

Questionnaires on sociodemographic characteristics, breastfeeding practices, and BSE as study

instruments were used in this study. BSE is interpreted as a mother's perceived breastfeeding ability and was measured by the Breastfeeding Self-Efficacy Scale Short Form (BSES-SF) (Dennis, 2003). Fourteen items as a self-reported instrument from the original BSES (Dennis & Faux, 1999) and Bandura's Social Cognitive Theory (Bandura, 1997) guided the development of the BSES using a Likert scale (1–5). A score of 1 was for "not at all confident" and a score of 5 was for "very confident." The total score ranged from 14 until 70. High scores indicated high levels of BSE. This scale includes technique and interpersonal thought dimension. In this study, Cronbach's alpha for the Indonesian translated BSES-SF was 0.94 with mean of 55.8 (standard deviation [SD] = 10.85), which was adapted from Wardani's study (2012).

Prior to collecting data, nursing research staff members were trained as data surveyors to help in data collection. After obtaining consent, data surveyors guided mothers to fill out the questionnaires. Mothers returned the questionnaires to the data surveyors for a final check. Data were analyzed using frequency distribution with central tendency. The data are expressed as the mean, SD, and percentage. Normality of distribution for all variables was checked. For cate-

gorical data, the Chi-square test was used to compare self-efficacy and demography. Statistical significance was defined as $p < 0.05$. All data were analyzed using SPSS-PC version 22 (Chicago IL, USA).

Results

Table 1, which presents the sociodemographic characteristics of mothers, shows that majority of the respondents were 20–35 years old (71.2%), and the percentage of mothers aged above 35 years old was high (23.1%). Moreover, the majority of mothers were senior or junior high school graduates and unemployed (69.3% and 91.3%, respectively). Most mothers had two or more children (52.9%) and lived with their husband (60.6%).

Table 2 describes the breastfeeding practices during the first 6 months of a baby's life. EBF prevalence was only 30.8%. Common reasons reported by mothers included breast milk not being sufficient for the infant, their babies being fussy, not having enough production of milk, and other reasons such as family and health suggestions and breast problems. This study also found several breastfeeding problems, amounting to 71.5%. This table showed that mothers

Table 1. Sociodemographic Characteristics of Respondents

Characteristics	Category (n= 104)	Number	Percent
Age of mothers (years)	Under 20 y.o.	6	5.8
	20–35 y.o.	74	71.2
	More than 35 y.o.	24	23.1
Education of mothers	Elementary school	17	16.3
	Junior high school	37	35.6
	Senior high school	35	33.7
	University	15	14.4
Employment status of mother	Unemployed	95	91.3
	Employed	9	8.7
Number of children	1 child	34	32.7
	2–3 children	55	52.9
	≥4 children	15	14.5
Living with	Husband	63	60.6
	Parent	14	13.5
	Husband and parent	27	26.0

Table 2. Mothers' Breastfeeding Practice During the First Six Months of a Baby's Life

Variables	Category (n= 104)	Number	Percent
Complementary Food	No	65	62.5
	Porridge	33	31.7
	Rice	3	2.9
	Biscuit	2	2.9
	Fruit	1	1.9
Extra Drink	No	38	36.5
	Mineral water	38	36.5
	Formula milk	26	25.0
	Honey	2	1.9
Exclusive Breastfeeding (EBF)	Yes	32	30.8
	No	72	69.2
Breast Feeding Skill	Good	29	27.9
	Not Good	75	72.1
Number of Breast Problems	No problem	30	28.8
	1 problem	36	34.6
	2 problems	19	18.3
	3 problems and more	19	18.3
Non-EBF Reasons	Not sufficient	15	14.4
	Fussy baby	10	9.6
	Less breast milk produce	10	9.6
	Infant thirsty	8	7.7
	Mothers desire	7	6.7
	Mothers work	5	4.8
	Others	17	16.4
Breastfeeding Support	High	49	47.1
	Low	55	52.9

Table 3. Mothers' Breastfeeding Self-Efficacy (BSE)

Variable	Mean	Min-Max	95% CI	SD
Breastfeeding Self-Efficacy	58.58	18–70	56.32, 60.83	11.58
Technique Dimension	37.77	13–45	36.34, 39.20	7.37
Interpersonal Thought Dimension	20.81	5–25	19.91, 21.71	4.62

did not have sufficient breastfeeding skills (72.1%). The majority of the mothers provided their infants with early complementary foods and extra drinks. Porridge was the most favorite complementary food (31.7%), and additional beverages such as mineral water and formula milk were commonly given to 6-month-old babies (36.5%). Approximately 52.9% of the respondents received minimal support from their family and surrounding people.

BSE among the mothers in this study was based on the BSES-SF score. Table 3 shows that the mean score for BSES was 58.58 with SD of 11.58. The minimum and maximum scores were 18 and 70, respectively. Majority of the respondents' scores were between 56.32 and 60.83. Moreover, the mean score of BSES for technique dimension was 37.77 from nine questions with 45 as maximal score and 7.37 as SD. The respondents' scores were between 36.34 and 39.2

39.20 with 90.5% CI. In terms of interpersonal thought dimension of BSES (five questions), the score mean was 20.81 (4.62 SD). The minimum and maximum scores were 5 and 25, respectively. Majority of respondents' scores were in the range of 19.91–21.71.

On the basis of the bivariate analysis in Table 4, mothers who were older than 30 years old were more likely to have better BSES than those who were under 30 years old. The BSES is significantly correlated with a mother's age ($p=0.01$) based on Table 4. Among the mothers, the multipara percentage was higher than the primipara percentage. However, paritas status was not significantly associated with BSES-SF. Although educated mothers and unemployed mothers are more likely to have better BSES than their counterparts, a mother's education and occupation were not significantly correlated with BSES in this study. The mothers living with their husbands possessed good mother breastfeeding self-efficacy than those who did not,

but no significant correlation was found between those mothers and BSES in this study.

Discussion

This study revealed that breastfeeding is not a popular practice among mothers in rural area in Indonesia. Approximately, 69.2% of mothers fed their babies with complementary foods before their babies were 6 months old. These results were similar to another study in Indonesia, where only less than half of infants younger than 6 months old have been exclusively breastfed (Agrina et al., 2015; Afyanti & Juliastuti, 2012). The national target for EBF in Indonesia is around 70% (Health Office of Riau, 2012), which shows that mothers discontinue to exclusively provide breast milk for their babies before 6 months of age.

The main reason for early provision of food supplementation during breastfeeding in this study was the perception of insufficient milk, and

Table 4. Bivariate Mother Breastfeeding Self-Efficacy (BSES) Analysis

Variables	BSES ^a			p
	Total	Low	High	
	104 (100)	42 (40,4)	62 (59,6)	
Age				
≤30 y.o	56 (53.8)	29 (27.9)	27 (26.0)	0.01
>30 y.o	48 (46.2)	13 (12.5)	35 (33.7)	
Education ^b				
Low	89 (85.6)	34 (32.7)	55 (52.9)	0.26
High	15 (14.4)	8 (7.7)	7 (6.7)	
Occupation				
Unemployed	95 (91.3)	37 (35.6)	58 (55.8)	0.33
Employed	9 (8.7)	5 (4.8)	4 (3.8)	
Parity				
Primipara	34 (32.7)	18 (17.3)	16 (15.4)	0.06
Multipara	70 (67.3)	24 (23.1)	46 (44.2)	
Living with				
Husband	63 (60.6)	27 (26.0)	36 (34.6)	0.36
Parent	14 (13.5)	7 (6.7)	7 (6.7)	
Both	27 (26.0)	8 (7.7)	19 (18.3)	

^abased on BSES-SF score

^blow: no school until senior high school; high: diploma or university

a crying infant was considered a sign that strengthened this perception. In this case, mothers perceive crying as the main indicator of insufficient breast milk (Lou et al., 2014). Perceived insufficient milk (PIM) is often experienced by breastfeeding mothers and is still being reported to date. PIM is the cause of early infant feeding and ultimately reduces EBF rates. These findings are in line with several studies that involved different samples (Hauck et al., 2011; Galipeau et al., 2018). Previous studies also reported that intervention of mothers' perceptions of milk insufficient is an important way to reduce early breastfeeding supplementation and discontinuation rates.

Several studies showed that mothers' perception of insufficient milk is significantly related to BSE. Self-efficacy is used for breastfeeding initiation and breastfeeding behavior prediction; it can be the strongest factor of successful breastfeeding (Tuthill et al., 2016). The majority of mothers with PIM in this study had higher BSE than those reported by other studies (Gokceoglu, 2017; Istikomah et al., 2020). Given that BSE measures mother's belief for breastfeeding ability of their baby, it is a reliable indicator of a mother's breastfeeding skills.

In this study, breastfeeding mothers faced various breastfeeding problems such as lack of breast milk, swollen breasts, and blisters on nipples. Breastfeeding problems that arise due to improper breastfeeding techniques in this study were mainly caused by insufficient breastfeeding skills. Mothers who do not properly breastfeed will experience reduced milk production, as mentioned in previous studies (Pertwi, 2012). Breastfeeding failure is caused by an error in positioning and attaching the baby. This condition makes the mother's nipples suffer from blisters, which can make the mothers reluctant to breastfeed, result in reduced milk production, and cause the baby to hesitate to suckle. Furthermore, this lack of breastfeeding skills results from the low access of breastfeeding-related information and guidance from breastfeeding mothers' surroundings. In this study, more

than half of the support received by breastfeeding mothers was categorized as low. A study by Agrina et al. (2019) revealed differences in breastfeeding skills between the intervention and the control group after receiving breastfeeding skill guidance.

In another study, Aprilia and Fitriah (2017) found that participants in the experimental group in breastfeeding classes who received formal training about breastfeeding have higher self-efficacy than respondents in the control group who did not benefit from breastfeeding formal training. A research conducted by Isyti'aroh and Rofiqoh (2017) showed a significant correlation between BSE and breastfeeding activities. High confidence about breastfeeding among mothers encourages them to practice correct activities or breastfeeding techniques. These studies have shown that self-efficacy influences breastfeeding. Breastfeeding mothers who have good knowledge about proper breastfeeding techniques mothers feel more confident about breastfeeding than those with poor knowledge.

In this study, bivariate analysis revealed that a mother's age was significant in the BSES-SF score. Compared with young mothers, adult mothers are more mature in thinking and ready to play a role as a parent, especially in terms of caring for the baby such as breastfeeding. Mothers who are above 30 years old are more experienced in breastfeeding their babies than their younger counterparts. Women who are breastfeeding for the first time are more likely to have lower BSE than women who have previously breastfed (Hauck et al., 2011). Breastfeeding experiences increase mothers' BSES-SF scores.

Conclusion

This study showed that self-efficacy among rural breastfeeding mothers is high. However, maternal perceptions of insufficient milk are the main reason for breastfeeding supplementation in rural areas. Interventions to increase breastfeeding skills and follow-up studies on BSE in antenatal care for young mothers are necessary

in the future. Using local languages was a limitation in this study even though the majority of the respondents could speak Indonesian.

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References

- Afiyanti, Y., & Juliastuti, D. (2012). Exclusive breastfeeding practice in Indonesia. *Br J Midwifery*, 20 (7), 484–491. doi: 10.12968/bjom.2012.20.7.484
- Agrina, Omote, S., Tsuda, A., Okuwa, M., Kimura, R., Syahrul, & Saito, R. (2017). A study of underweight determinant factors among toddlers in Riau, Indonesia. *Journal of Wellness and Health Care*, 41 (1), 61–69.
- Agrina, Kimura, R., & Tsuda, A. (2015). Mother's exclusive breastfeeding behavior: A cross sectional study in Pekanbaru, Indonesia. *International Journal of Research in Medical Sciences*, 3 (1), 109–118. doi: 10.18203/2320-6012.ijrms20151530
- Agrina, Sabrian, F., Zulfitri, R., Arneliwati, Herlina, & Dewi, A.P. (2019). The effectiveness of simulation health education to mother breastfeeding skill between two groups in rural area of Riau, Indonesia. *Enfermeria Clinica*, 29 (Supp 1), 9–12. doi: 10.1016/j.enfcli.2018.11.006
- Aprilia, D., & Fitriah A. (2017). Effectiveness of breastfeeding classes to improve self-efficacy of breastfeeding moms. *Jurnal Studi Anak dan Gender Muadalah*. 4 (2), 113–122.
- Balogun, O.O., Dagvadorj, A., Anigo, K.M., Ota, E., & Sasaki, S. (2015). Factors influencing breastfeeding exclusivity during the first 6 months of life in developing countries: A quantitative and qualitative systematic review. *Maternal & child nutrition*, 11 (4), 433–451. doi: 10.1111/mcn.12180
- Bandura, A. (1997). *Self-efficacy in changing society*. Cambridge University Press.
- Bernardo, H., Cesar, V., & World Health Organization. (2013). *Long-term effects of breastfeeding: A systematic review*. World Health Organization. Retrieved from <https://apps.who.int/iris/handle/10665/79198>
- Dennis, C.L., & Faux, S. (1999). Development and psychometric testing of the breastfeeding self-efficacy scale. *Research in Nursing & Health*, 22 (5), 399–409. doi: 10.1002/(sici)1098-240x(199910)22:5<399::aid-nur6>3.0.co;2-4
- Dennis, C.L. (2003). The breastfeeding self-efficacy scale: Psychometric assessment of the short form. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 32 (6), 734–744. doi: 10.1177/0884217503258459
- Duijts, L., Jaddoe, V.W., Hofman, A., & Moll, H.A. (2010). Prolonged and exclusive breastfeeding reduces the risk of infectious diseases in infancy. *Pediatrics*, 126 (1), e18–e25. doi: 10.1542/peds.2008-3256
- Galipeau, R., Baillet, A., Trottier, A., & Lemire, L. (2018). Effectiveness of interventions on breastfeeding self-efficacy and perceived insufficient milk supply: A systematic review and meta-analysis. *Maternal and Child Nutrition*, 14 (3), e12607. doi: 10.1111/mcn.12607
- Gokceoglu E., & Kucukoglu S. (2017). The relationship between insufficient milk perception and breastfeeding self-efficacy among Turkish mothers. *Glob Health Promot*, 24 (4), 53–61. doi: 10.1177/1757975916635080
- Hauck, Y. L., Fenwick, J., Dhaliwal, S. S., & Butt, J. (2011). A Western Australian survey of breastfeeding initiation, prevalence and early cessation patterns. *Maternal and Child Health Journal*, 15 (2), 260–268. doi: 10.1007/s10995-009-0554-2
- Health Office of Riau. (2012). *Health profile of Riau Province*. Health Office of Riau.

- Istikomah, I., Wardiah, A., & Rilyani, R. (2020). Hubungan antara parenting self-efficacy dengan persepsi ibu tentang insufficient breast milk ibu post-partum di Kotabumi. *Jurnal Ilmiah Keperawatan Sai Betik*, 15 (2), 95–102. doi: 10.26630/jkep.v15i2.1491
- Isyti'aroh, I., & Rofiqoh, S. (2017). Breastfeeding self-efficacy dan hubungannya dengan perilaku ibu menyusui. *Jurnal Kesehatan Pena Medika*, 7 (2), 106–117.
- Kramer, M.S., & Kakuma, R. (2012). Optimal duration of exclusive breastfeeding. *Cochrane Database Syst Rev*, 8, CD003517. doi: 10.1002/14651858.CD003517.pub2
- Lou, Z., Zeng, G., Huang, L., Wang, Y., Zhou, L., & Kavanagh, K. F. (2014). Maternal reported indicators and causes of insufficient milk supply. *Journal of Human Lactation*, 30 (4), 466–473. doi: 10.1177/0890334414542685
- Maryunani, A. (2015). *Inisiasi menyusu dini, ASI eksklusif dan manajemen laktasi*. CV. Trans Info Media.
- Meedy, S., Fahy, K., & Kable, A. (2010). Factors that positively influence breastfeeding duration to 6 months: A literature review. *Women Birth*, 23 (4), 135–145. doi: 10.1016/j.wombi.2010.02.002
- Ministry of Health Republic of Indonesia. (2013). *Basic health research 2013*. Research and Development Agency of the Ministry of Health Republic of Indonesia.
- Pertiwi, S.H., Solehati, T., & Widiastih, R. (2012). Faktor-faktor yang mempengaruhi proses laktasi Ibu dengan bayi usia 0-6 bulan di Desa Cibeusi Kecamatan Jatinangor. *Students e-Journal*, 1 (1), 30.
- Robert, E., Coppieters, Y., Swennen, B., & Dramaix, M. (2014). The reasons for early weaning, perceived insufficient breast milk, and maternal dissatisfaction: Comparative studies in two Belgian regions. *International Scholarly Research Notices*, 1–11. Retrieved from <http://www.hindawi.com/journals/isrn/2014/678564/>
- Tuthill, E.L., McGrath, J.M., Graber, M., Cusson, R.M., & Young, S.L. (2016). Breastfeeding self-efficacy: A critical review of available instruments. *Journal of Human Lactation*, 32 (1), 35–45. doi: 10.1177/0890334415599533
- Wardani, M.A. (2012). *Breastfeeding self-efficacy in primigravide mother* (Undergraduate Thesis, unpublished). Faculty of Nursing Universitas Indonesia. Retrieved from <http://lib.ui.ac.id/file?file=pdf/abstrak-20311620.pdf>
- World Health Organization. (2011). *Exclusive breastfeeding for six months best for babies everywhere*. World Health Organization. Retrieved from <https://www.who.int/news/item/15-01-2011-exclusive-breastfeeding-for-six-months-best-for-babies-everywhere>
- World Health Organization. (2017). *Global breastfeeding scorecard: tracking progress for breastfeeding policies and programmes*. Retrieved from <https://www.who.int/nutrition/publications/infantfeeding/global-bf-scorecard-2017/en/>
- UNICEF. (2015). *The state of the world's children [executive summary]*. UNICEF.
- Vygen, S.B., Roberfroid, D., Captier, V., & Kolsteren, P. (2013). Treatment of severe acute malnutrition in infants aged < 6 months in Niger. *Journal of Pediatrics*, 162 (3), 515–521. doi: 10.1016/j.jpeds.2012.09.008