

RESEARCH ARTICLE

Knowledge, Attitude, and Behavior of Indonesian Breastmilk Donors via the Internet

Iva Septyani, Sri Umijati

Midwifery Education Study Program, Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia

Abstract

Breastmilk donors are increasingly widespread and can be done by mothers easily and rapidly through the internet. This study aims to analyze the correlation of knowledge and attitudes of breastmilk donors to the behavior of breastmilk donors via the internet in Indonesia. The study used a cross-sectional analytic design and using a total sampling technique by sending research instruments in the form of the Google form was conducted in January–April 2017. The study respondents were breastmilk donors who posted information on their breastmilk to be shared through Facebook Human Milk 4 Human Babies Indonesia in Jakarta, Depok, Indramayu, Bandung, and others were totaling 41 respondents. Statistical analysis using the Spearman test with confidence level was $\alpha=0.05$. The study results showed that the correlation to knowledge and behavior of breastmilk donors had p value=0.080, while the correlation on attitude and behavior of breastmilk donors had p value=0.715. In conclusion, there was no correlation between the attitude of breastmilk donors and the practice of breastmilk sharing via the internet.

Key words: Attitude, behavior, breastmilk sharing, internet, knowledge

Pengetahuan, Sikap, dan Perilaku Pendonor ASI via Internet di Indonesia

Abstrak

Donor air susu ibu (ASI) semakin marak dan dapat dilakukan para ibu dengan mudah dan pesat melalui internet. Penelitian ini bertujuan mengetahui hubungan pengetahuan dan sikap pendonor ASI dengan perilaku donor ASI via internet di Indonesia. Penelitian ini merupakan penelitian desain analitik *cross-sectional* dan menggunakan teknik *total sampling* dengan mengirimkan instrumen penelitian dalam bentuk *Google form* yang dilakukan pada bulan Januari–April 2017. Responden penelitian adalah pendonor ASI yang mem-*posting* informasi ASI-nya untuk dibagikan melalui *Facebook Human Milk 4 Human Babies Indonesia* di Jakarta, Depok, Indramayu, Bandung, dan lain-lain yang berjumlah 41 responden. Analisis statistik menggunakan Uji Spearman dengan tingkat kepercayaan $\alpha=0,05$. Hasil penelitian menunjukkan bahwa hubungan pengetahuan dengan perilaku pendonor ASI memiliki nilai $p=0,080$, sedangkan hubungan sikap dengan perilaku pendonor ASI memiliki nilai $p=0,715$. Simpulan, tidak terdapat hubungan pengetahuan dan sikap pendonor ASI dengan perilaku pendonor ASI via internet di Indonesia.

Kata kunci: Berbagi ASI, internet, pengetahuan, perilaku, sikap

Received: 21 July 2017; Revised: 27 August 2018; Accepted: 1 November 2018; Published: 31 December 2018

Correspondence: Iva Septyani. Grand Pamulang Residence Blok F-10, South Tangerang 15414, Banten, Indonesia. Mobile: +6281281761471. E-mail: iva.septyani@gmail.com

Introduction

The number of breastmilk donors has multiplied, along with the development of internet technology, provided a choice of breastmilk donors accessible via the internet.¹ The demand for breastmilk donors in Indonesia increased by 3–5 fold from 2007–2012. It is increasingly effortless to do via the internet.² Currently, the number of mothers who are aggressively pumping breastmilk makes the production of breastmilk exceeds the needs of infants till this surplus offered as something "untested" and "unregulated" through the internet. About 60% of breastmilk donors via the internet do not show any screening for HIV, hepatitis, or syphilis in their posts, although it may be communicated privately to recipients using offline communication.³ The behavior of breastmilk donors via the internet is not yet understood enhance by the absence of human milk banks in Indonesia that are capable of screening both breastmilk, and their donors make this topic interesting.⁴ The Regulation of the Minister of Health Republic of Indonesia on Breastmilk Donors has not ratified till now.^{5,6} However, knowledge of breastmilk as the best food for babies makes all mothers seek breastmilk. Breastmilk donors motivated to help others based on the trust between donors and recipients.⁷ This knowledge and attitude shared without prior knowledge and consideration of the risks that can occur. Breastmilk donors are not without risk, for example, breastmilk can transmit various bacteria and viruses.⁸ Dinger et al.⁹ found breastmilk to transmit streptococcus infection. A study found that breastmilk found from internet donor as much as 74% of samples contained gram-negative bacterial colonization and 21% contained DNA-positive cytomegalovirus.¹⁰ Transmission of the HIV via lactation described by WHO reached 5–20% and without antiretroviral risk doubled to 40%.¹¹ Case reports on "HIV transmission from surrogate breastfeeding" occurred in Spain.¹²

Based on these problems and risks, this study aims to determine the relationship between breastmilk donor health behaviors and factors influence the behavior, knowledge, and attitude.

Methods

The study used the cross-sectional analytic design with the sample of all breastmilk donors who posted donor information via Facebook community titled Human Milk 4 Human Babies

(HM4HB) Indonesia from January to April 2017. The approval to use information in the HM4HB Indonesia has been granted by the community administrator. The sample uses the total sampling technique by sending research instruments in the form of Google form to respondents.

Before data collection, the designated respondents provided with information about this research and asked for their willingness to join by emphasizing ethical issues that include consent, anonymity, and confidentiality. The subject was breastmilk donors that upload information to donate on the HM4HB Indonesia, willing to become the respondent and answer the research questions on Google forms. During the data collection processed, there were 41 people responded from Jakarta, Depok, Indramayu, Bandung, and others. The results were analyzed statistically using Spearman analysis with confidence level $\alpha=0.05$.

This study had been reviewed and approved by the Health Research Ethics Committee, Faculty of Medicine, Universitas Airlangga Surabaya by ethical clearance letter number: 011/EC/KEPK/FKUA/2017.

Results

The subjects of this study were 41 respondents. The characteristics of the respondents were the majority aged 26–35 years old (34 of 41), have a college education (39 of 41), working (25 of 41), and reside in Jakarta (14 of 41) (Table 1).

The results of respondents' knowledge on breastmilk and breastmilk donors showed in Table 2. Most respondents (34 of 41) have been able to correctly answer that a person with HIV disease and hepatitis B should not be a breastmilk donor.

Table 3 showed the results of filling out questionnaires about respondents' attitudes on breastmilk and breastmilk donors.

The behavior of the respondents in breastmilk donor via internet showed in Table 4. The most common reason for recipient breastmilk infants was that their breastmilk is not enough (23 of 41), followed by unspecified medical reasons for infants, infants incompatible with infant formula, and preterm infants younger than one month.

The results of this study indicate no relationship between knowledge of breastmilk donors and the behavior of breastmilk donors ($p=0.080$) and the correlation coefficient of 0.276. However, results show that respondents who are well behaved are

Table 1 Characteristics of the Respondents

| Characteristics | n=41 |
|--|------|
| Maternal age (years) | |
| 20–25 | 4 |
| 26–30 | 14 |
| 31–35 | 20 |
| 36–45 | 3 |
| Working status | |
| Not working | 16 |
| Working | 25 |
| Province (city) | |
| Jakarta | 14 |
| West Java (Depok, Indramayu, Bandung) | 9 |
| East Java (Surabaya, Malang, Sidoarjo) | 7 |
| Banten (Tangerang, South Tangerang) | 5 |
| North Sumatera (Medan, Nias) | 2 |
| South Borneo (Balangan, Banjarmasin) | 2 |
| East Borneo (Balikpapan) | 1 |
| Yogyakarta (Bantul) | 1 |
| Maternal education | |
| High School graduate | 2 |
| College graduate | 39 |

also well-informed (Table 5).

Attitudes of respondents also showed the same thing; there was no correlation of breastmilk donors attitude and breastmilk donors behavior ($p=0.715$) with the correlation coefficient of 0.059 (Table 6).

Discussion

The knowledge of mothers on breastmilk and breastmilk donors by Reeder et al.¹³ suggested that the delivery of information on breastmilk by health workers is effective. The education on lactation management learning such as

Table 3 Attitude of the Respondents on Breastmilk and Breastmilk Donor

| Question of Attitude | Answer | n=41 |
|---|-------------------|------|
| Felling on participate in the activities of breastmilk donors. | Common | 1 |
| | Happy | 6 |
| | Very happy | 34 |
| There is a baby who cannot get the opportunity to get breastmilk. | Very not sad | 5 |
| | Not sad | 1 |
| | Ordinary | 3 |
| | Sad | 10 |
| | Very sad | 22 |
| The donation of breastmilk should include the results of consultation or health laboratory results of donors. | Strongly disagree | 1 |
| | Disagree | 1 |
| | Less agree | 12 |
| | Agree | 15 |
| | Strongly agree | 12 |
| The role of health workers is very much needed. | Very not needed | 1 |
| | Not needed | 1 |
| | Less needed | 4 |
| | Needed | 11 |
| | Very much needed | 24 |
| Mother who decided to give formula milk compared to seek breastmilk donor? | Agree | 3 |
| | Less agree | 15 |
| | Disagree | 11 |
| | Very disagree | 12 |
| Breastmilk cannot transmit disease, virus or bacteria. | Strongly agree | 3 |
| | Agree | 11 |
| | Less agree | 10 |
| | Disagree | 9 |
| | Very disagree | 8 |
| Sick mothers donate breastmilk. | Less agree | 7 |
| | Disagree | 8 |
| | Strongly disagree | 26 |

breastmilk nutrition, how to prevent and overcome common problems breastmilk in working mothers because they are also expected

Table 2 Knowledge of the Respondents on Breastmilk and Breastmilk Donor

| Question of Knowledge | Answer | |
|--|--------|-------|
| | True | False |
| Can a person with cytomegalovirus disease be breastmilk donor? | 24 | 17 |
| Can a person with HIV disease be breastmilk donor? | 34 | 7 |
| Can a person with hepatitis B disease be breastmilk donor? | 33 | 8 |
| Can a person who has had a blood transfusion in the past year be breastmilk donor? | 13 | 28 |
| Benefits of the pasteurization process of flash heating on breastmilk | 6 | 35 |

Table 4 Behavior of the Respondents in Breastmilk Donor

| Behavior | Answer | |
|---|--------|----|
| | Yes | No |
| Motivation to participate in breastmilk donor | | |
| Compassion if surplus milk had to discard | 33 | 8 |
| Help others | 38 | 3 |
| Driven by religious orders | 5 | 36 |
| Habitual | 1 | 40 |
| Reason for recipient breastmilk infants | | |
| Unspecified medical reasons for infants | 15 | 26 |
| Preterm infants younger than one month | 6 | 35 |
| Infants are incompatible with infant formula | 15 | 26 |
| Problem of breastfeeding | 13 | 28 |
| Not enough | 23 | 18 |
| Unspesific medical reasons for mothers | 9 | 32 |
| Working or travelling mother | 7 | 34 |
| Donated dairy breastmilk were | | |
| <1 month postpartum | 10 | 31 |
| In 1–6 month postpartum | 29 | 12 |
| >6 months postpartum | 16 | 25 |
| >12–24 month postpartum | 1 | 40 |
| Involved health workers in donating breastmilk at | 6 | 35 |
| Do you consume alcohol? | 0 | 41 |
| Are you a smoker? | 0 | 41 |
| Do you use narcotics? | 0 | 41 |
| Have you ever had blood transfusions in the past year before donating breastmilk? | 0 | 41 |
| Has been screened for HIV | 17 | 24 |
| Has been screened for hepatitis B | 24 | 17 |
| Has been screened for hepatitis C | 20 | 21 |
| Has been screened for syphilis | 12 | 29 |
| Has been screened for cytomegalovirus | 10 | 31 |

to breastfeed exclusively. This material does not convey the method of breastmilk to women with sexually transmitted infections (STIs) and breastmilk donor procedures and screening of potential breastmilk donors as well as the highly basic flash-heating pasteurization technique as an effort to prevent transmission of the disease.¹⁴ Pre-determined rules on exclusive breastmilk more widely disseminated, while further regulations on

breastmilk were still under discussion.⁶

Donors feel pleased to help those in need.¹⁵ Meanwhile, studies in the Kupang area showed that most mothers stated that they still preferred formula milk and did not accept the concept of breastmilk donors because of the risk of infection.^{16,17}

Assessment of results regarding respondent behavior is inversely proportional to the

Table 5 Correlations of Knowledge and the Behavior of Breastmilk Donors

| Knowledge | Behavior | | | p Value | $\alpha=0.05$ |
|-----------|-------------|------------|-------------|---------|---------------|
| | Good (n=12) | Fair (n=7) | Poor (n=22) | | |
| Good | 9 | 4 | 9 | 0.08 | 0.276 |
| Fair | 1 | 1 | 5 | | |
| Poor | 2 | 2 | 8 | | |

Table 6 Correlations on Attitude and the Behavior of Breastmilk Donors

| Knowledge | Behavior | | | p Value | $\alpha=0.05$ |
|-----------|-------------|------------|-------------|---------|---------------|
| | Good (n=12) | Fair (n=7) | Poor (n=22) | | |
| Good | 3 | 1 | 5 | 0.715 | 0.059 |
| Fair | 9 | 5 | 15 | | |
| Poor | 0 | 1 | 2 | | |

assessment of knowledge. Both donors and recipients share breastmilk online are reportedly less likely to involve healthcare workers in making breastmilk decisions.^{7,18} The American Academy of Pediatrics (AAP) provides rules on breastmilk and using breastmilk not from breastmilk sharing sources, but doctors may not discuss this topic and families are reluctant to inquire about these clues.¹⁹ Health workers should be more vigilant because every baby has the possibility of receiving breastmilk from another mother and should be asked about the baby's intake. It is essential to know the risks involved in breastmilk activities, but also to educate the public on how best to use breastmilk.¹

Research on breastmilk donors via the internet in the United States depicts more mothers donating their breastmilk at infants aged between 3–5 months (55%), then infants aged 6–8 months and infants >8 months with numbers of 26% of total 52%.³ The Indonesian Pediatric Association states mothers who wish to donate breastmilk have to go through several screening stages. The first screening points are to have babies less than six months old.²⁰ The World Health Organization (WHO) explains the energy content in breastmilk of 6 months babies were less than breastmilk on less than six months babies. After the age of 6 months breastmilk no longer able to meet energy needs.²¹

Mannel et al.²² revealed recipients' decisions to seek donor milk are common conditions that often coincide with or exacerbate lactation insufficiency. In addition to having a positive side, breastmilk donors also have a negative side, such as the risk of transmission of infection as well as being demotivators for recipients mother to breastfeed. A breastmilk donor is only a temporary solution and not a long-term solution, and the mother should also get counseling from a breastmilk counselor in the long run.²³

Human Milk Banking Assessment of North America (HMBANA) receive breastmilk with criteria for infants aged <1 year.²⁴ In contrast to

policies by Royal Prince Alfred (RPA) Hospital, Human Milk Donor (HDM) Program in Sydney, New South Wales, Australia. The hospital can only accept breastmilk donors from mothers whose children are treated in the NICU room or receive frozen donor breastmilk from mothers whose babies die in NICU RPA hospital by performing previous screening procedures. The mother who delivered and her baby died at another hospital, her breastmilk was not accepted, and they only received screening tests.²⁵ Preterm infants were noted to have high levels of nitrogen, total proteins, immune proteins, total lipids, total energy, some vitamins, and minerals. The content of electrolytes, protein and also breastmilk nutrition from mothers who gave birth to premature babies is higher than breastmilk from mothers who gave birth to mature babies. The composition of breastmilk from premature baby mothers will turn into similar breastmilk from mature baby mothers within 3–4 weeks. However, by that time the baby is also old enough so that the mother's milk is suitable for her/his needs.²⁶

The information from donors stated that 40% had infectious diseases and only three donors stated specific illnesses, 2% of respondents described having screened hepatitis B and C, 1% for syphilis and 0% for HIV.¹⁹ All types of diseases can be transmitted through breastmilk and infect infants who receive it. Mothers infected with HIV infection justified the reasons for not breastmilk permanently, mothers with cytomegalovirus who gave birth to premature babies are also unable to breastfeed. Although there is no reason not to breastfeed with infants for hepatitis B mothers, the acquisition of hepatitis B virus in small amounts in breastmilk remains a concern about the role of breastmilk in the transmission.²¹

The result of research related to the knowledge and attitude of the donor of breastmilk to the behavior of breastmilk donor has not yet compared with other research.

Researches by Palmquist and Doehler,¹⁸ Keim

et al.,¹⁹ and Reyes-Foster et al.²⁷ illustrate that breastmilk activities appear in the general public of the United States, especially in college-educated women. The better a person's knowledge, the better it is in applying the material he has acquired. Science is a vehicle for the underlying of a person behaving scientifically while its level depends on the science or primary education of the person,¹⁷ whereas attitude is not yet an action or activity, but it is predisposing to action behavior. Attitude is a readiness to react to objects in specific environments as an appreciation of the object. Attitudes are also not automatically manifested in action (overt behavior).

Several studies have shown behavior adopted after passing through knowledge stages, attitude, and practice.^{13,17} However, other studies also prove that the process is not always similar to the above phases, even in everyday practice it might go the other way around. That is, a person has behaved positively, although his knowledge and attitude are harmful or otherwise. Knowledge does not affect one hundred percent of the behavior in donating breastmilk.¹⁵ External factors include environmental health professionals who have not educated on breastmilk donors, health facilities such as breastmilk banks not yet available in Indonesia.¹⁶ Breastmilk donor units that can screen breastmilk donors and affordable health services by the broader community, as well as government regulation have not explicitly stated about breastmilk donors.²⁵

Similarly, to make the attitude to be a real action required supporting factors or a condition that allows among other facilities or support factors (support) from other parties.¹⁶ In the practice of breastmilk donors is one of them from the recipient itself that does not include a request about the current breastmilk safety conditions on the processed of pumped, stored, prevention of transmission of infection, as well as the content of the donor's milk itself. Breastmilk recipient does not know the risks of the breastmilk donor.²⁴ The above shows how the complex factors behind the formation of human attitudes and behaviors.

Recipients from 90% breastfeed donors do not explicitly require the health and safety of breastmilk practices from the donor. Health behaviors and disease screening affecting breastmilk security have not been a prominent topic in the donor posts.¹⁹ Many discussions have already developed on the topic of possible risk and benefit events from breastmilk donors.¹⁸ One approach to the security of internet-based

breastmilk expressed by Walker and Armstrong²⁸ is four pillars supporting the security of sharing breastmilk that is informed consent, donor screening, safe handling, and home pasteurization.

The Prevention of Mother to Child Transmission Program (PMTCT) established since the issuance of Regulation of the Minister of Health of the Republic of Indonesia Number 51 of 2013 can at least be one of the solutions in screening for infectious diseases against HIV during integrated antenatal care.²⁹ If it is correctly applied, at least the health status of each mother can be known, and the risk of transmission of infection anticipated.

Conclusions

This study shows that there is no correlation between knowledge and attitude of breastmilk donors to their behavior.

Conflict of Interest

The authors declare no conflict of interests.

References

1. Geraghty SR, Heier JE, Rasmussen KM. Got milk? Sharing human milk via the internet. *Public Health Rep.* 2011;126(2):161-4.
2. Amirullah, Sutanto M. Ingin mendonorkan ASI? Ini caranya. *Tempo.co.* 3 Agustus 2012 [cited 2016 September 9]. Available from: <https://gaya.tempo.co/read/421089/ingin-mendonorkan-asi-ini-caranya>.
3. Keim SA, McNamara KA, Jayadeva CM, Braun AC, Dillon CE, Geraghty SR. Breast milk sharing via internet: the practice and health and safety considerations. *Matern Child J.* 2014;18(6):1471-9.
4. Anna LK, Roeslani R. Donor ASI tak bisa sembarangan. *Kompas.com.* 1 Agustus 2012 [cited 2016 September 11]. Available from: <https://lifestyle.kompas.com/read/2012/08/01/15232091/Donor.ASI.Tak.Bisa.Sembarangan>.
5. Putra YMP, Minarto. Kemenkes godok peraturan tentang donor ASI. 1 Agustus 2012 [cited 2016 September 10]. Available from: <https://republika.co.id/berita/gaya-hidup/infosehat/12/08/01/m82hyr-kemenkes-godokperaturan-tentang-donor-asi>.
6. Solehudin I, Izwardy D. Kemenkes-MUI

- belum sepakat, aturan tentang donor ASI mandek. JawaPos.com. 7 Agustus 2016 [cited 2016 September 10]. Available from: <https://www.jawapos.com/nasional/humaniora/07/08/2016/kemenkes-mui-belum-sepakat-aturan-tentang-donor-asi-mandek>.
7. Gribble K.D. "I'm happy to be able to help: "why women donate milk to a peer via internet-based milk sharing network. *Breastfeed Med.* 2014;9(5):251–6.
 8. Yohmi E. Berharap pada donor ASI. Ini risikonya sembarangan minum ASI dari donor. *detikHealth.* 1 Agustus 2012 [cited 2016 September 11]. Available from: <https://health.detik.com/berita-detikhealth/d-1980736/ini-risikonya-sembarangan-minum-asi-dari-donor>.
 9. Dinger J, Müller D, Pargac N, Schwarze R. Breast milk transmission of group B streptococcal infection. *Pediatr Infect Dis J.* 2002;21(60):567–8.
 10. Keim SA, Hogan JS, McNamara KA, Gudimetla V, Dillon CE, Kwiek JJ, et al. Microbial contamination of human milk purchased via the internet. *Pediatrics.* 2013;132(5):e1227–35.
 11. World Health Organization (WHO). HIV transmission through breastfeeding: a review of available evidence. 2007 update. Geneva: WHO Press; 2008.
 12. Bartholomew C, Bartholomew M, Jones A. HIV transmission from surrogate breastfeeding. *Lancet.* 2005;366(9500):1902.
 13. Reeder SJ, Martin LL, Griffin DK. *Keperawatan maternitas: kesehatan wanita, bayi, & keluarga.* Edisi ke-18. Vol. 1. Jakarta: Penerbit EGC; 2012.
 14. Kementerian Kesehatan Republik Indonesia. Dukung ibu bekerja beri ASI eksklusif. 14 September 2015 [cited 2016 September 6]. Available from: <http://www.depkes.go.id/article/view/15091400003/dukung-ibu-bekerja-beri-asi-eksklusif.html>.
 15. O'Sullivan EJ, Geraghty SR, Rasmussen KM. Informal human milk sharing: a qualitative exploration of the attitudes and experiences of mothers. *J Hum Lact.* 2016;32(3):416–24.
 16. Murray L, Anggrahini SM, Woda RR, Ayton JE, Beggs S. Exclusive breastfeeding and the acceptability of donor breast milk for sick, hospitalized infants in Kupang, Nusa Tenggara Timur, Indonesia: a mixed-methods study. *J Hum Lact.* 2016;32(3):438–45.
 17. Notoatmodjo S. *Promosi kesehatan dan ilmu perilaku.* Jakarta: Rineka Cipta; 2007.
 18. Palmquist AEL, Doehler K. Human milk sharing practices in the U.S. *Matern Child Nutr.* 2016;12(2):278–90.
 19. Keim SA, McNamara KA, Dillon CE, Strafford K, Ronau R, McKenzie, et al. Breastmilk sharing: awareness and participation among women in the moms2moms study. *Breastfeed Med.* 2014;9(8):398–406.
 20. Pratiwi IGAN, Satuan Tugas ASI Ikatan Dokter Anak Indonesia. Donor ASI. 4 April 2014 [cited 2016 November 26]. Available from: <http://www.idai.or.id/artikel/klinik/asi/donor-asi>.
 21. Ikatan Dokter Anak Indonesia (IDAI). *Indonesia menyusui.* Jakarta: BP IDAI; 2010.
 22. Mannel R, Martens P, Walker M. *Core curriculum for lactation consultant practice.* 3rd Edition. Sudbury, MA: Jones & Bartlett Learning; 2013.
 23. Anna LK, Sutanto M. Unit donor ASI harus ada di fasilitas kesehatan. *Kompas.com.* 3 Agustus 2012 [cited 2016 September 11]. Available from: <https://nasional.kompas.com/read/2012/08/03/10564073/Unit.Donor.ASI.Harus.Ada.di.Fasilitas.Kesehatan>.
 24. Brent N. The risk and benefits of human donor breast milk. *Pediatr Ann.* 2013;42(5):84–90.
 25. Carroll KE, Lenne BS, McEgan K, Opie G, Amir LH, Bredemeyer S, et al. Breast milk donation after neonatal death in Australia: a report. *Int Breastfeed J.* 2014;9(1):23.
 26. Satuan Tugas ASI Ikatan Dokter Anak Indonesia. *Breastfeeding sick babies.* Jakarta: BP IDAI; 2015.
 27. Reyes-Foster BM, Carter SK, Hinojosa MS. Milk sharing in practice: a descriptive analysis of peer breastmilk sharing. *Breastfeed Med.* 2015;10(5):263–9.
 28. Walker S, Armstrong M. The four pillars of safe breast milk sharing. *Midwifery Today Int Midwife.* 2012;(101):34–7.
 29. Peraturan Menteri Kesehatan Republik Indonesia Nomor 51 Tahun 2013 tentang *Pedoman Pencegahan Penularan HIV dari Ibu ke Anak.*