

DOI: 10.21767/1791-809X.1000466

Strategies to Promote Six Months of Exclusive Breastfeeding: A Review of Theses and Undergraduate Theses of Faculty of Public Health, University of Indonesia, Indonesia

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Received: 19.04.2016; Accepted: 16.09.2016; Published: 26.09.2016

Abstract

EBF is one of major factors in child survival, growth and development. Strategies have been done to improve the prevalence of breastfeeding. Several studies examining the role of health education, support from family and peers, and support from health professionals on EBF has been carried out in Indonesia. In current study, we aimed to explore the role of such strategies on EBF prevalence by reviewing 22 theses (bachelor's and master's) and doctoral dissertations from Faculty of Public Health, University Indonesia.

There were 7 studies that evaluated the effects of mothers being exposed to EBF information from different sources of media. The percentages of mothers being exposed to EBF information through media ranged from 47.5%-85.2%. No indication that being exposed to EBF information through media is associated with EBF practice. There was a significant positive correlation between percentages of mother received support from families and peer for EBF and percentages of practicing EBF ($r=0.587$, $p=0.005$). This involved all 22 studies. Evaluation for mother received support from health providers was obtained from 20 studies (12 studies in rural, and 8 in urban settings). Mothers in rural areas were reported to receive higher support from health provider for EBF compared to those reported in urban areas (59.0%-87.7% vs. 48.1%-64.1%, respectively). Positive correlation between percentages of receiving support from health providers and of practicing EBF was found ($r=0.504$, $p=0.028$).

We conclude that all strategies were effective to improve EBF practice. Considerations regarding the target of intervention need to be made. For working mothers, family and peer support, and also adequate EBF information seems to be more effective. Current available modes of communication such as twitter, facebook and the like might be well used to share EBF information. Meanwhile, supports from family and health providers would seem to be the best option for housewives.

Keywords: Exclusive breastfeeding; Health education; Family support; Health professional support

Abbreviations: EBF: Exclusive Breastfeeding; PHC: Primary Health Center; HP: Health Provider

Background

Improving infant and young child feeding are key points to prevent morbidity and mortality among these children. Exclusive breastfeeding (EBF) and continued breastfeeding with complementary feeding are the major factors in child survival, growth, and development [1]. The latest findings of a systematic review suggested that EBF with no other foods or liquids for 6 months has several advantages over EBF for 3 to 4 months, and no growth deficits have been demonstrated among infants either in developed or developing countries who are exclusively breastfed for 6 months [2]. EBF has been demonstrated to prevent morbidity and mortality from gastrointestinal infection in developing countries [3]. The World Health Organization (WHO) recommends that infants should be exclusively breastfed until the age of 6 months to achieve optimum growth, development and health [2]. However, despite the well-recognized importance of EBF, the practice is not widespread in developing countries. A trend analysis of data from 66 developing countries showed an increase of only 5% from 33% in 1995 to 39% in 2010 [4].

The ideal nourishment for the first six months of life is breast milk. It provides all the nutrients, minerals and vitamins that an infant requires [5]. Moreover, breast milk helps against multiple diseases, such as gastrointestinal and acute respiratory infections [6-8], thus, reduces infant mortality and helps faster recovery during illness [8]. Breastfeeding has also been reported to stimulate sensory and cognitive development [9,10]. Optimal breastfeeding is expected to prevent 1.4 million deaths among children under five, in developing countries annually [11].

In Indonesia, the national Demographic and Health Survey indicated an increase in the prevalence of EBF, from 37% in 2007 to 42% in 2012 [12,13]. Another national survey reported an EBF prevalence of 34% in 2013 [14]. Although progress has been made in Indonesia, as well as in other developing countries, more than half of the infants did not receive EBF as recommended. As exclusive breastfeeding is a major factor in child survival, its success would affect neonatal death rate.

Despite neonatal death rates in Indonesia has been greatly reduced (32 death per 1000 in 1991 to 19 death per 1000 in 2012), the disparity of death rates among regions was still remarkable, with the lowest was 13 in South Sulawesi and the highest was 35 in West Papua province [13,15]. Therefore, strong efforts are needed to improve the prevalence of exclusive breastfeeding. Health education and peer support interventions have been reported to improve the prevalence of breastfeeding.

In the current study, we aimed to report the prevalence of EBF in different regions and to examine whether health education on EBF and support from family/peers and health professionals increase the likelihood that a mother will exclusively breastfeed her infant until the age of 6 months. Findings of this study would have an important contribution to the development of strategies to promote EBF. In order to fulfil our study aims, we reviewed theses and dissertations of students from the Faculty of Public Health, University of Indonesia (FPH UI).

Methods

Search strategy

We reviewed several studies that had been conducted to investigate the influence of breastfeeding promotion and education through health personnel as well as through media, and also examine the effect of family support on the practice of EBF. We used the WHO's recent definition of EBF, which is to give no other meal except breast milk to newborn until the age of 6 months [2]. We included studies on EBF between 2003 and 2014 because the definition of EBF changed in 2002. Prior to 2002, the period of EBF was until infants reached the age of 4 months. The included studies originated from the Faculty of Public Health and included bachelor's and master's theses, as well as doctoral dissertations. All documents were archived in the Faculty of Public Health Library.

We restricted our search to studies that employed cross-sectional and cohort design, and also surveys. Case-control studies were not considered eligible in our search due to the nature of the design which prevents us from calculating the prevalence of EBF. We applied "exposed to breastfeed information", "family support", and "health provider support" as the exposure terms and "exclusive breastfeeding" as the outcome terms.

In the initial search (keyword search using lib.fkm.ui.ac.id, a portal of FPH UI online library), we identified 264 studies. The titles and abstracts of these studies were reviewed by three authors independently. The studies were selected for further review if they addressed the followings: 1) exposure to breastfeeding information, education or promotion by health personnel, family, or from media, (2) family and peer support for EBF, and (3) health personnel support for breastfeeding with the practice of EBF. Any disagreement between the three authors was discussed with the lead author to reach consensus. We excluded any qualitative studies, duplication of data (studies using the same data for other objectives, but still

related to breastfeeding), and studies that did not address our research questions. In addition, we also select studies which meet our standard, i.e. study design and analysis in accordance with our study aims, study participants were mother of infants aged 6-12 months, and sample size minimum of 80.

This step resulted in 49 studies that potentially fit our selection criteria. Authors then reviewed the full text of those 49 studies, and confirmed that 22 studies meet our selection criteria. The remaining 27 studies were excluded due to various reasons that include the use of different EBF definition, exposure or outcome of the studies did not meet our research questions, potential information bias due to ambiguous questions that could lead to misclassification of exposure status, and inadequate sample size. From the eligible 22 studies, most of them (20 out of 22) were bachelor's theses, and only 2 were master's theses; no eligible studies were found from doctoral dissertations (**Figure 1**).

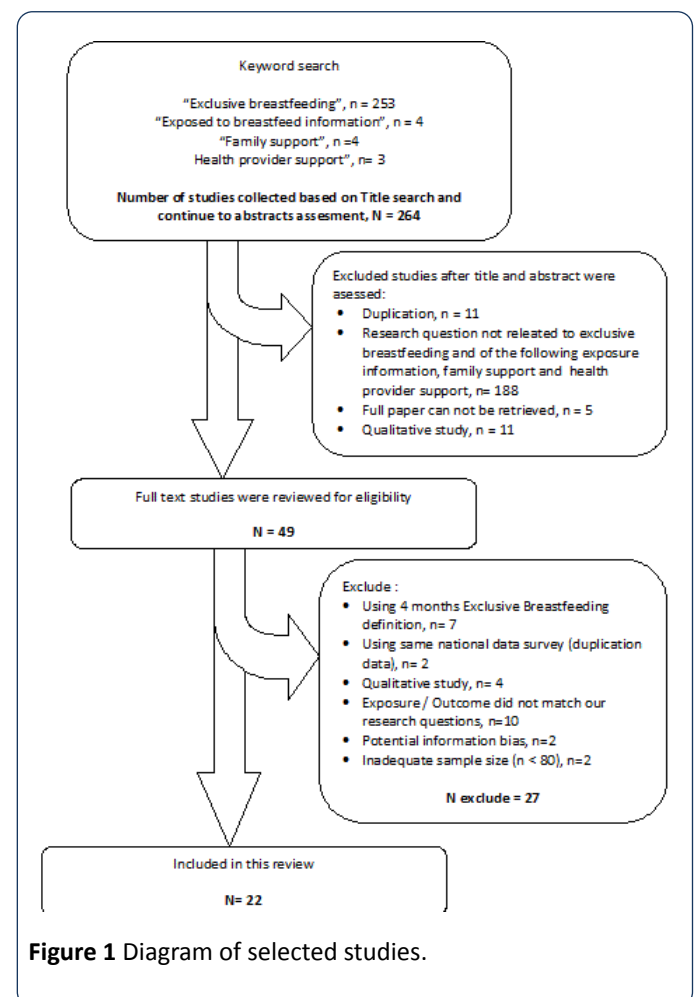


Figure 1 Diagram of selected studies.

Full text of each selected studies was retrieved, and the consistency between the objectives, method and study result in each study were reviewed by three authors. To solved any disagreement among authors, the first author assessed the full text and decided whether to include or exclude the study. Included studies then extracted to inclusion form which consist of study objective, method of collecting data, sample size, and study result.

Data analysis

Descriptive information was presented as proportions. We measured the correlation between the percentage of EBF and exposure of breastfeeding promotion, education, and support based on the correlation coefficient. Linear regression was used to analyze the association of exposed to EBF information, family support, health support and the prevalence of EBF. The associations between mothers' exposure to EBF information and/or support for EBF and EBF practice were presented as the ORs and 95% CI which were obtained from the original studies.

Results

As can be seen in the map (**Figure 2**), most of the studies were conducted in Java Island, the most populated area in Indonesia. Some studies were carried out in Sumatra and Sulawesi, which are two other large islands in the country. Thirteen studies were conducted in rural areas, and nine were in urban areas.



Figure 2 Location of studies on the effect of breastfeeding education and promotion, and support from health personnel and families on exclusive breastfeeding in Indonesia.

Characteristics of the studies included in this review

Table 1 summarizes the characteristics and main results of the 22 eligible studies conducted between 2004 and 2014 by students of FPH UI that examined the association between EBF practice and exposure to breastfeeding information, education or promotion by health personnel, family or from media, and also family and/or health personnel support. Nine studies were done in urban areas, of which, five were carried out in Jakarta Metropolitan areas, the capitol of Indonesia. Three other studies were done on the outskirts of Jakarta, including in the surrounding areas of the University of Indonesia. Seven studies (31.8% of the total studies included) were done outside of Java Island, of which five studies were done in rural areas.

Most of the reviewed studies examined support for EBF from health provider(s), as well as from the families. Exposures to EBF information (from media, family and peers, as well as direct health education) were studied only in 4 studies that were done in rural areas and three studies in urban areas. Most of the studies, both in rural and urban areas, enrolled about 100 to 200 respondents. Only two rural studies and two urban studies included fewer than 100 subjects. By and large, the number of participants in rural studies was comparable to those who participated in urban studies. All studies included in this review employed cross-sectional design.

The studies included in this review had different sites for subject recruitment. Studies carried out in rural areas mostly recruited eligible subjects among mothers who visited the Primary Health Care (PHC) for any reasons (9 out of 13 studies in rural settings). Only four studies carried out in rural settings recruited subjects from the community where the lists of potential subjects were obtained from posyandu (Pos Pelayanan Terpadu or Integrated service post). Posyandu is a monthly clinic for children and pregnant women at the village level, providing vaccinations and nutritional supplements [15]. On the other hand, studies conducted in urban areas recruited subjects from different sites, such as the PHC, community, and even from the workplace.

Percentage of EBF

The percentages of mothers practicing EBF among all 22 studies ranged widely. The smallest was 7.78%, which was reported by a study done in rural Central Java at a primary health center [16-19], and the highest was 63.3%, which was reported by a study done in urban West Sumatra [20-34]. Central Java province is considered as one of the most well-developed areas in the country, while West Sumatra province is likely to be categorized as medium-high developed area. In general, the percentage of mothers practicing EBF was reported to be higher in urban settings than in rural areas (mean percentage of 30.4% in rural areas vs. 39.7% in urban areas), and higher in studies done at the primary health center than those carried out in the community (mean percentage of 36.3% in primary health center vs 31.7% in the community).

We also differentiated the results by regions, comparing findings from studies conducted in and outside Java Island. The Java Island could be considered as the most populated and developed area in the country, in terms of economic and education development, with a higher number of health facilities/personnel. It is also where the capitol city is located. We found that studies that were done outside of Java Island reported relatively lower rates of mothers practicing EBF, especially those carried out in rural areas. The percentage of EBF in Java Island ranged between 7.78% and 63.3% while outside Java Island the percentage was between 13.9% and 86.5%. In the urban areas, the percentage was 24.3%-63.3% in Java Island, lower than outside Java Island (29.3%-86.5%). In

rural areas the percentages of EBF were mostly higher in Java Island (7.8%-53.2%) than outside Java Island (13.9%-30.8%).

Table 1 Characteristics of the 24 studies included for review on the effect breastfeeding education and promotion, and support from health personnel and families on exclusive breastfeeding practice.

No	Authors and years	Study locations	Study settings	Sample size	Subject recruitment sites	Percent ages of EBF (%)	Percentages of the presence of facilitating factors for EBF (%)		
							Exposed to EBF information	Family support for EBF	HP support for EBF
1	Rubinem [16]	Banyumanik, Semarang, Central Java	Rural	100	PHC	23	78	42	59
2	Nofyanti [17]	Sumberjaya, Majalengka, West Java	Rural	122	Community	34.4	47.5	47.5	87.7
3	Intan Meiniwati [18]	Kebon Sari, Madiun, East Java	Rural	115	PHC	49.6	85.2	78.3	73
4	Sudjaroh [19]	Kramat, Tegal, Central Java	Rural	90	PHC	7.8	-	30	40
5	Maryani [20]	Bojongsari, Purbalingga, Central Java	Rural	106	PHC	44.3	-	82.1	84
6	Asnani [21]	Wundulako, Kolaka, Southeast Sulawesi	Rural	240	PHC	30.8	-	68.3	85
7	Muliati Kendek [22]	Tomoni, Luwu Timur, South Sulawesi	Rural	127	PHC	23.6	-	74	80.2
8	Elizabeth Nangoy [23]	Suwawa, Bone, South Sulawesi	Rural	100	PHC	23	85	58	64
9	Hajjah Septia Utami [24]	Koba, Tengah, Belitung, Bangka	Rural	105	Community	25.7	-	54.3	70.5
10	Yudi Iskandar [25]	Rimbo Ilir, Tebo, Jambi	Rural	144	Community	13.9	-	68.7	57.6
11	Christina Legawati Huka [26]	Cijeruk, Bogor, West Java	Rural	210	Community	22.9	-	52.4	71.9
12	Ucu Yoanah [27]	Cipanas, Lebak, West Java	Rural	92	PHC	43.5	-	88	-
13	Tri Agustina [28]	Wonosari, Gunung Kidul, Central Java	Rural	203	PHC	53.2	-	55.7	71.2
14	Lutfi Prisma Nurini [29]	Cilincing, North Jakarta	Urban	200	PHC	47.5	-	58	62
15	Wiwit Faisal [30]	Pandang, Padang, West Sumatra	Urban	174	Community	29.3	-	59.8	58.6
16	Yeye Fahrina Inayatillah [31]	Astana Anyar, Bandung, West Java	Urban	103	PHC	24.3	-	61.2	64.1
17	Nur Chowiyah [32]	Kramat Jati, East Jakarta	Urban	87	PHC	37.9	-	43.7	56.3
18	Ida [33]	Beji, Depok, West Java	Urban	172	Community	25.6	51.2	63.4	45.9
19	Mery Ramadani [34]	Padang Utara, Kota Padang, West Sumatra	Urban	186	Community	86.5	-	57	51.1
20	Nia Afriana [35]	Tanah Abang, Central Jakarta	Urban	218	Workplace	28	81.7	76.6	48.6

21	Anna Andreani Aksa. [36]	Kebayoran Lama, South Jakarta	Urban	120	PHC	63.3	-	84.2	-
22	Marly Apandi [37]	Wanasari, Cibitung, Bekasi	Urban	210	Community	15.2	77.6	50	48.1

Notes: PHC=Primary Health Center; HP=Health provider; EBF=Exclusive breast-feeding

Factors that potentially facilitate exclusive breastfeeding practice

Factors that potentially facilitate EBF practice among mothers with infants aged older than six months were: 1) being exposed to EBF information from media, family and peers, as well as from health personnel/providers; 2) receiving support from family; and 3) receiving support from the health provider. The results presented here were based on a review of each of the factors mentioned above.

Mothers being exposed to EBF information: Only seven studies evaluated the effects of mothers being exposed to EBF information from all sources, i.e., media (e.g., newspaper, radio, television, and internet), family and peers, and health personnel/providers. Four of the studies were carried out in the rural area while three studies were in the urban setting.

The percentages of mothers exposed to EBF information ranged from 47.5% to 85.2% (**Table 1**). The percentages were not far different between rural and urban settings. Correlation between percentages of mothers being exposed to EBF information and percentages of EBF practice in the seven studies indicated that there was no association between the two (coefficient correlation $r=0.062$, p -value 0.921) (**Figure 3**). Similarly, the linear regression results indicated that there was no association between mothers' exposure to EBF information and their EBF practice. The R-square of the regression was only 0.004, indicating that having a high percentage of mothers exposed to EBF information in a population could not predict a high percentage of mothers practicing EBF.

On the other hand, the results seen at the individual study level did not show a similar pattern as the result based on regression analysis above. Findings from individual studies were examined based on the ORs and 95% CI produced by the studies (**Figure 4a and Figure 5a**). The results showed an increased chance of mothers practicing EBF among those who were exposed to EBF information, but there was one study that had an OR of 0.85, 95% CI: 0.30-2.39 [18]. The largest OR was shown by a study done in rural area in Central Java (N=100) [16] with a very wide confidence interval (OR=8.25, 95% CI: 1.05-65.11). The only study that showed a significant result with somewhat narrow confidence interval was the study done in the rural community setting in West Java (OR=2.44, 95% CI: 1.13-5.25; N=122) [17].

When stratified by the location where the study subjects were recruited, we found that there was only one study done in a workplace setting. This study demonstrated a significant association (OR=4.24, 95% CI: 1.44-12.48) [35]. Three studies

were done in a health facility (primary health center), of which only one showed a significant association between exposure to EBF information and EBF practice [16]. Three other studies were done in community settings, all of which showed a significant association between the exposure to EBF information and EBF practice.

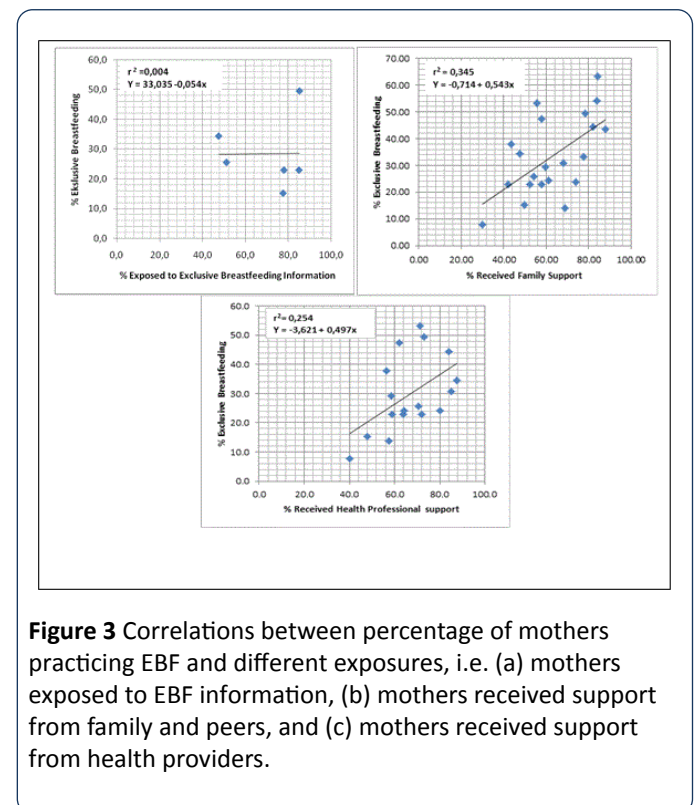
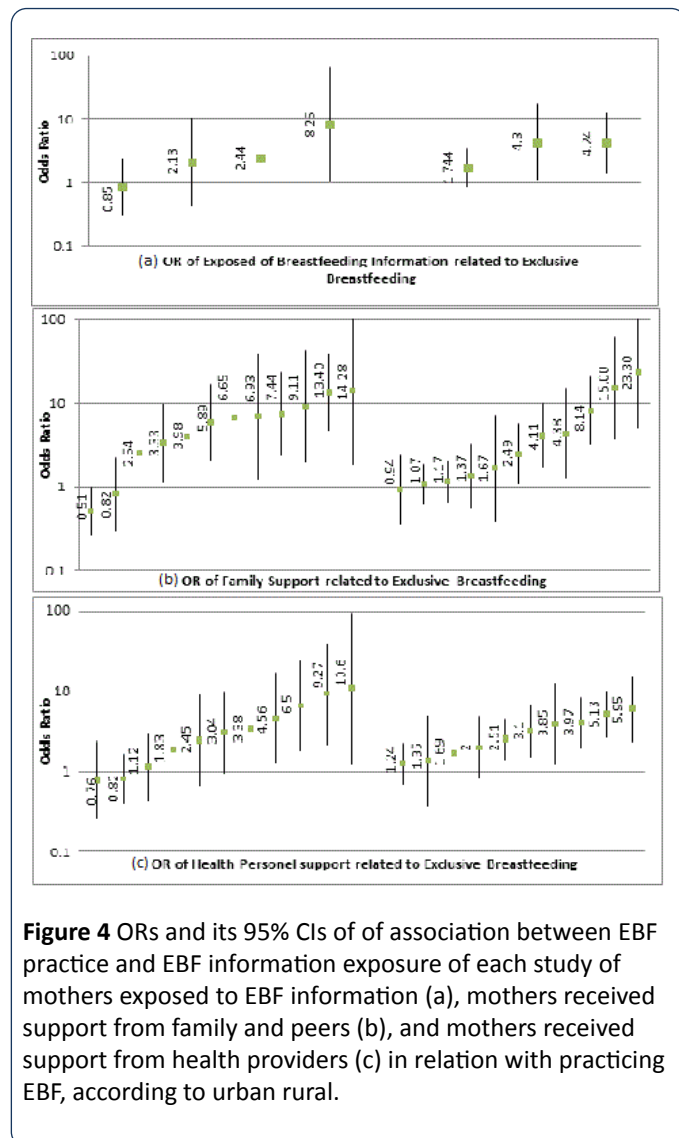


Figure 3 Correlations between percentage of mothers practicing EBF and different exposures, i.e. (a) mothers exposed to EBF information, (b) mothers received support from family and peers, and (c) mothers received support from health providers.

Mothers receiving support from family and peers to practice EBF: All of the 22 studies included in this review evaluated the effect of support from families and peers on mothers' EBF practice EBF, of which 13 studies were done in rural settings, and nine were in urban areas. The studies included in this review reported that between 30% and 88.04% of mothers received support from families and peers to practice EBF (**Table 1**). The percentages of mothers receiving family and peer support for EBF reported in studies in the urban setting were not as widely varied compared to those reported in rural studies (30%-88.04% vs. 50%-83.8%, respectively). Correlation between the percentages of mothers receiving family and peer support for EBF and percentages of EBF practice indicated a positive association between the two ($r=0.587$, p value=0.005) (**Figure 3**). Regression of the two percentages indicated a positive relationship between mother receiving family and peer support for EBF and EBF practice. The R-square of the regression was 0.345, indicating that having a high percentage of mothers receiving family and peer

support for EBF in a population would be followed by a high percentage of mothers practicing EBF.



Most of the studies demonstrated ORs that indicated significant positive associations between the support and the practice of EBF, ranging from 2.54 (95% CI: 0.99-6.48) [18] to 14.28 (95% CI: 1.86-109.57) [21] in studies done in rural settings and from 4.11 (95% CI: 1.71-9.91) [33] to 23.30 (95% CI: 5.04-107.59) [36] in urban settings. There were several studies that showed no effect or non-significant weaker effects, which were mostly indicated by studies carried out in urban sites. These study results revealed that there was a stronger effect of support from family and peers for EBF in rural settings than in urban areas.

The associations mentioned above were also evaluated based on the location where the participants were recruited, i.e., health facilities (primary health center), community, and workplace (**Figure 4b**). There was only one study done in the workplace, which was not surprisingly located in an urban area. This study showed an increased chance of practicing EBF with the support of family (OR= 2.50, 95% CI: 1.10-5.69). Among the 14 facility-based studies, ten studies showed a significant association between family/peers support exposure

and EBF practice [16]. Seven other studies were done in community settings, 5 of which showed significant relationships between the family/peers support exposure and EBF practice.

Mothers receiving support from health providers to practice EBF: There were 20 studies evaluated the effect of support from health providers on EBF practice; twelve studies were carried out in rural settings and eight were in urban areas. The percentages of mothers receiving support from the health provider to practice EBF reported by the 20 studies ranged from 48.1% to 87.7%. Mothers in rural areas were reported to receive higher support from health providers for EBF compared to those reported in urban areas (59.0% to 87.7% versus 48.1% to 64.1%, respectively) (**Table 1**). Percentages of mothers receiving support from health providers for EBF showed a positive correlation with EBF practice ($r=0.504$, p value=0.028). The R-square of the regression was 0.254, indicating that having a high percentage of mothers receiving support from health providers for EBF in a population would be followed by a high percentage of mothers practicing EBF.

Figure 4c shows the associations between health provider support and EBF practice according to rural versus urban settings. The effects of support from health providers for EBF practice were more substantial in rural areas compared to those in urban settings. Six out of 11 studies carried out in rural settings showed that support from health providers is associated with increased likelihood of mothers to practice EBF. The associations were of a high magnitude, although one of the ORs showed a borderline significance: ranging from 3.38 (95% CI: 1.05-10.88) [23] to 10.6 (95% CI: 1.22-92.27) [19]. The likelihood of mothers practicing EBF related to health provider support reported from studies carried out in urban settings were found to be between 2.51 (95% CI: 1.39-4.54) [34] to 5.95 (95% CI: 2.33-15.18) [36].

The effects of health provider support for EBF were more extensive in studies that recruited subjects from health facilities compared to the community. There was only one study that recruited samples from the workplace, and such effect was not found. The range of significant effects in studies done in health facilities was reported from 1.69 (95% CI: 0.95-3.02) [29] in urban areas to 10.6 (95% CI: 1.22-92.27) in rural areas [19]. The significant effects reported from studies done in the community setting were mostly of lower magnitudes, ranging from 2.51 (95% CI: 1.39-4.54) [34] to 3.97 (95% CI: 1.90-8.33) [33]. By and large, majority of the included studies were found to show significant effects (**Figure 5b and c**).

Discussion

This current study evaluated studies of students in the FPH UI on EBF between 2003 and 2014. Our search strategy followed that of a systematic review. We did not calculate the pooled estimate because of the sources of our study were restricted to bachelor's and master's theses that were listed in the library (no doctoral dissertation that fulfilled our study aim

was found). Therefore, the results could still be biased from the true value because bachelor's and master's theses done at the University of Indonesia might not be representative of results from the other theses or research done in other university or area. Although the source was the library database, our review included studies from several different parts of Indonesia, such as Metropolitan Jakarta, West Java, Central Java, East Java, Sumatra, and Sulawesi.

based on one study done in Central Jakarta (in a government institution) [35]. The prevalence of EBF in the study conducted in a workplace was not high (28%); however, being exposed to EBF information was associated with a four-fold increase in the likelihood of practicing EBF. A study in Southeast Ethiopia found that employed mothers were less likely to practice EBF [37-39]. To improve this situation, providing systematic information about EBF, coupled with creating an enabling, breastfeeding-friendly working environment for working mothers is recommended. EBF education, in a study in rural Bangladesh, was reported to have no increased likelihood of practicing EBF [40]. Our results showed that exposure to EBF information was also less effective at increasing the likelihood of practicing EBF; however, our library did not have many studies that analyzed the exposure to EBF information.

In our study, a higher effect was observed among mothers who received support for EBF. This indicates the importance of social and emotional support from a partner and other family members on breastfeeding which has also been reported by a study in Bristol, UK [41]. Another study, a literature review done by Shahla et al. in New South Wales found that women who intend to breastfeed for a longer period and are well supported by their family demonstrated positive and prolonged breastfeeding behaviour [42]. Similar results were found among the studies being reviewed in this current analysis, that support from family and peers seems to improve the practice of breastfeeding in almost all of the studies included. However, the effects were more apparent among women living in urban areas as opposed to those in rural settings. It might be that more women in urban settings were working mothers, and thus, the role of family caregiver becomes crucial in breastfeeding the infant with milk that has been expressed by the mother and kept in the refrigerator. However, in rural areas, most women do not work outside the house, and hence, the issue of family member support becomes less critical.

The present study also found a significant effect of health provider's support on EBF practice. The result was consistent with a systematic review that reported a pooled estimate of the effect of health professional support for EBF (OR=1.14; 95% CI: 1.06-1.22) [43]. In our study, the role of health provider's support on EBF practice was found to be of a lesser scale compared to those of family support, both in urban and rural settings. The effects of health providers' support on EBF practice in studies that recruited subjects in health facilities is stronger than in community-based studies. Such a role was insignificant among working mothers, however. Unfortunately, this study was not able to directly attribute this finding to particular characteristics of subjects recruited in the facility, compared to subjects recruited in the community or workplace, to explain the different findings by subject recruitment location. However, the stronger findings in facility-based studies could indicate the potential opportunity for health education and support in health facility setting to obtain a higher effect on EBF practice.

Our review has some limitations which stem mainly from the methodological weaknesses of the included studies. The

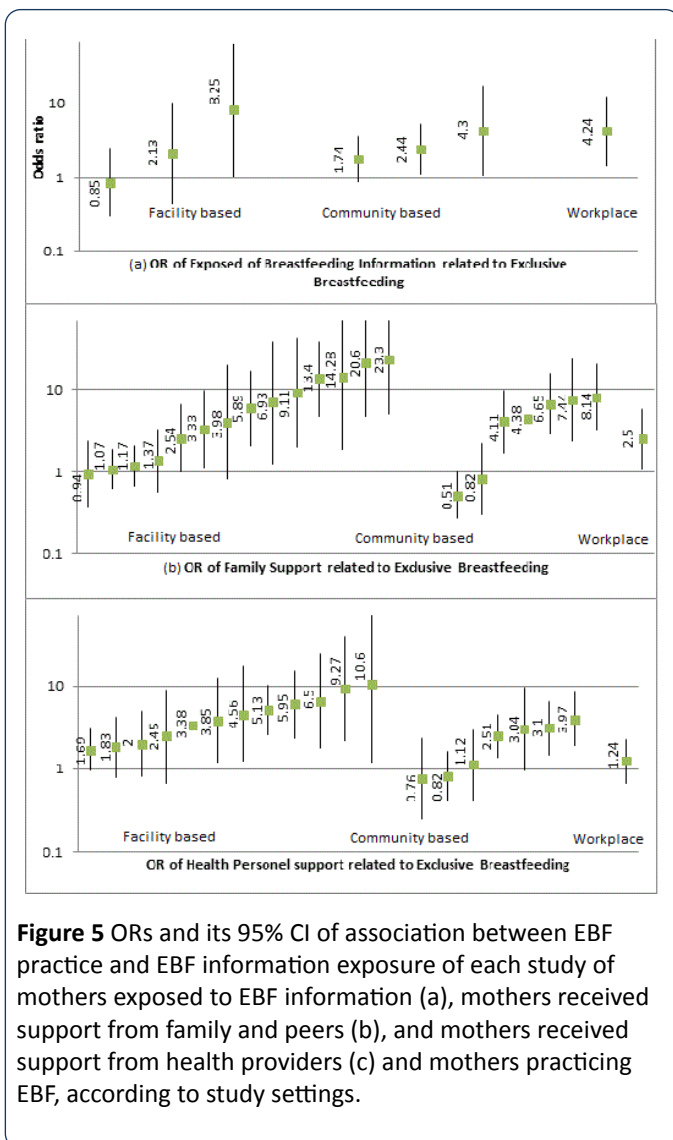


Figure 5 ORs and its 95% CI of association between EBF practice and EBF information exposure of each study of mothers exposed to EBF information (a), mothers received support from family and peers (b), and mothers received support from health providers (c) and mothers practicing EBF, according to study settings.

The prevalence of EBF in the studies included in this review was found to be higher in urban than in rural settings (mean prevalence of 39.7% and 30.4%, respectively). These figures are not different from the previously reported prevalence, nationally [12-14] or internationally [11]. Our investigation found that among the strategies to improve the prevalence of EBF (i.e., being exposed to EBF information from media, family, peers and health professionals, or received support from family and peers, or received support from health providers), being exposed to EBF information from a variety sources seems to have the least effect on EBF practice although the least effects were still of large magnitudes. Exposure to EBF information seems to have a positive effect among mothers recruited in the workplace, despite the fact that it is only

possibility of a variety of biases including selection (which related to the type of population and sample size) and information bias could not be ruled out. The large confidence intervals found in many of the included studies might be a hint of the chance due to the small sample size that might have occurred in the studies. However, judging from the wide range of EBF prevalence, and the prevalence of the facilitating factors for EBF, the biases that might be present were not systematically in one direction. Thus, if a pooled estimate is being calculated, the likelihood of excessive underestimation or overestimation would be of a lesser magnitude.

The lessons learned from this qualitative review are that all strategies to improve the practice of EBF were effective. However, considerations should be made based on the type of mothers (the target) when carrying out a strategy for intervention to promote EBF. If the target is working mothers, the role of health professional support would be of lesser magnitude. In this group, family and peer (friends) support, as well as adequate EBF information, seems to be more effective, presumably using currently available modes of communication such as Twitter and Facebook. For housewives who might not go to a health facility too often, family, as well as health professional supports, would be the best option for women in urban as well as in rural areas.

Competing interests

The authors declare that they have no competing interests.

Authors' Contributions

A.C.A concepting, write, supervise and finalizethe paper; S.Maemun, W.Sari and Ritanugraini decide the topic, collect the data, and write the draft of paper; S.Choirunisa analyze the data, write, finalize the paper.

Acknowledgement

This paper has been reviewed by Gina Samaan (US CDC for Field of Epidemiology Training Programme Indonesia).

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