

Exclusive breastfeeding but not selected contraceptives use delayed resumption of menstruation

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Abstrak

Latar belakang: Pemberian ASI eksklusif dapat memperpanjang lama amenorrhea pascapersalinan. Namun, masih banyak ibu yang tetap menggunakan metode kontrasepsi lain disamping LAM. Penelitian ini bertujuan untuk mengetahui pengaruh durasi pemberian ASI eksklusif terhadap kembalinya menstruasi pascapersalinan.

Metode: Penelitian ini menggunakan data SDKI 2007 yang memiliki desain penelitian cross sectional. Terpilih 2072 perempuan yang memiliki anak terakhir usia 0–6 bulan. Analisis data dilakukan dengan metode regresi cox dan pembobotan sampel.

Hasil: Di antara 2072 perempuan, 55,3% belum mengalami menstruasi pada saat wawancara dan 32% menyusui eksklusif. Namun, di antara ibu yang menyusui eksklusif terdapat 29,5% yang masih menggunakan metode kontrasepsi lain. Ibu yang memberikan ASI eksklusif durasi 0-4 bulan tidak berhubungan dengan kembalinya menstruasi pascapersalinan. Dibandingkan dengan ibu yang tidak memberikan ASI eksklusif, ibu yang menyusui eksklusif dengan durasi lima bulan dapat menurunkan risiko 45% untuk mengalami menstruasi kembali [Risiko relatif suaian (RRa) = 0,55; 95%CI = 0,34-0,92]. Risiko tersebut akan turun 57% setelah menyusui eksklusif selama enam bulan. Di sisi lain, penggunaan kontrasepsi tertentu mempercepat kembalinya menstruasi pascapersalinan.

Kesimpulan: Pemberian ASI eksklusif dan bukan kontrasepsi tertentu dapat memperlambat kembalinya menstruasi pascapersalinan setelah menyusui minimal lima bulan. Petugas kesehatan dan masyarakat harus diberi informasi lebih jelas bahwa pada enam bulan pertama pascapersalinan tidak dianjurkan untuk menggunakan kontrasepsi kombinasi yang mengandung estrogen. (*Health Science Indones 2010; 1: 3 - 7*)

Kata kunci: ASI eksklusif, kontrasepsi, menstruasi

Abstract

Background: Exclusive breastfeeding can delay the resumption of postpartum menstruation; this is a natural contraceptive method. However, mothers still used another family planning method to ensure contraceptive continuity. This study aimed to identify the association exclusive breastfeeding duration on the resumption of menstruation.

Methods: We analyzed a part of data from Indonesian Demographic and Health Survey (IDHS) 2007. The sub-sample included in the analysis was women whose last birth of children 6 months or less. The Cox regression model and sample weighting factors was used for analysis.

Results: Out of 2072 women, 55.3% women still amenorrhea and 32% exclusive breastfeed their babies. Among exclusive breastfeeding mothers, 29.5% used another contraception method. Compared with mother who did not practice exclusive breastfeeding, mothers who practiced it for 5 months had 45% lower risk to be resumption of menstruation [adjusted relative risk (RRa) = 0.55; 95% CI = 0.34-0.92]. The reducing resumption of menstruation was increased for 57% among those who exclusive breastfed for 6 months. On the other side, current certain contraceptive use was increase the risk of menstruation.

Conclusion: Exclusive breastfeeding for 5 months and not selected contraception methods reduce the risk of resumption of menstruation among women. Health providers and community should be more informed that not to use combined oral contraceptive which contain estrogen in the first six months postpartum. (*Health Science Indones 2010; 1: 3 - 7*)

Key words: exclusive breastfeeding, contraceptive, menstruation

Lactation Amenorrhea Method (LAM) is a family planning option during postpartum period in developing countries, including Indonesia. Studies consistently demonstrate that breastfeeding can postpone the return of menstruation. However, mothers still used another family planning method to ensure contraceptive continuity.¹

LAM has three elements: (a) full or nearly full breastfeeding; (b) postpartum amenorrhea; and (c) an infant aged less than six months. LAM is limited to six months because infant-feeding guidelines recommend that supplementation with other foods should begin at six months. LAM protects against fertility to 98% within the first six months after delivery among breastfeeding women.² The effectiveness of this method declines if any one of the conditions is not met. This requires that the woman uses another family planning method to ensure contraceptive continuity to avoid the risk of an unplanned pregnancy.¹

There has been considerable debate about the wisdom of offering LAM as a contraceptive method to individual couples because the onset of menses and initiation of complementary feeds in the infant's diet cannot be easily predicted by women, and because of, the possible influence of LAM on delaying decisions for use of other spacing methods.¹

In order to have an update data for maternal and child health care and administration of family planning, therefore, it is important to analyze the association of exclusive breastfeeding duration on the resumption of menstruation.

METHODS

We analyzed a part of data from national Indonesian Demographic and Health Survey (IDHS) in 2007 in all (33) province in Indonesia. Sampling frameworks of IDHS based on stratified sampling design. Data were collected by teams of interviewers, employed 104 interviewing teams. Each team consisted of one team supervisor, one field editor, three female interviewers, and one male interviewer.

A total of 832 persons, 468 women and of 364 men, participated in the main survey training for interviewers. Training took place nine training centers. The subjects consisted of 40,701 households, 32,895 ever married women age 15-49, and 8758 currently married men age 15-54.³

The sub-sample included in the analysis was based on women who were met all criteria: (1) women whose have a live last child 0-6 months at the time of interview, (2) complete data for each variable. Subject were 2151 women whose last-born have a live last child 0-6 months. For this analysis we excluded 79 subjects who had missing value either in amenorrhea status, duration of exclusive breastfeeding, mother's working hours. Leaving 2072 women entered into the analysis.

Women classified as amenorrhea were women who did not had resumed menstruation after delivery of the last child until interview taken. Duration of amenorrhea was number of months after the birth of last child until the first menstruation occurred.

Breastfeeding status refers to a 24-hour period (yesterday and the past night). Children classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements.⁴ For this analysis, exclusive breastfeeding we categorized into 6 subgroups (not exclusive, exclusive for 0-1 months, exclusive 2 months, exclusive 3 months, exclusive 4 months, exclusive 5 month, exclusive 6 months).

Contraception use was divided into 3 subgroups, did not using any method, non hormonal contraception (including others), and hormonal contraception use (progesterone and estrogen either in pill, injection and nor plant).

The others information among others was, contraception use, parity, mother's formal education, working hours, type of residence and wealth status. Parity was divided into 2 subgroups (1-2 children and 3-12 children). Mother's educational status divided into 3 groups (no education, basic education=primary and junior high school, higher education=senior

high school or higher). Mother's working hours per day divided into 3 subgroups (not working or as housewife, working for 1-8 hours/day, and working for 8-24 hours/day. Residence was divided into 2 subgroups (urban and rural). Wealth status was divided into 3 subgroups based on wealth quintile (low=lowest and second quintile, middle=middle quintile, and high=fourth and highest quintile).

We perform Cox regression analysis and weighting factors using STATA version 9.0 software. A number of risk factors were examined potential confounders and/or effect modifiers.⁴ We have permission from Macro International to analyze apart of IDHS data.

RESULTS

Table 1 show that prevalence of women who had menstruation was 44.7% (927/2072) among 2072 women. Most of the subjects had basic education (59.3%), not working or as house wife (71.5%) and lived in rural residence (62.8%).

Table 1 also shows the resumption of menstruation similarly distributed with respect to mother's working hours. Furthermore, compared to the respective references group, middle and high wealth status, rural residence, 3-12 parity, primary and higher education more likely to be at risk for the resumption of menstruation during the first six months post

Table 1. Several maternal, demographic factors and risk of resumption menstruation

	Resumption of menstruation		Crude relative risk	95% Confidence interval	P
	Not resumed (n=1145)	Resumed (n=927)			
Parity					
1-2	646	639	1.00	Reference	
3-12	499	288	0.58	0.48-0.71	0.000
Mother's formal education					
None	51	14	1.00	Reference	
Primary education	713	516	4.62	2.34-9.13	0.000
Higher education	381	397	6.04	3.05-11.97	0.000
Mother's working hours					
Not work	815	667	1.00	Reference	
1- 8 hours/day	267	193	0.93	0.76-1.15	0.515
8-24 hours/day	63	67	1.13	0.78-1.64	0.517
Type of residence					
Urban	360	410	1.00	Reference	
Rural	785	517	0.68	0.57-0.81	0.000
Wealth status					
Low	640	371	1.00	Reference	
Middle	207	182	1.26	0.98-1.63	0.069
High	298	374	2.02	1.66-2.47	0.000

Our final model (Table 2) reveals mothers who give exclusive breastfeeding for 0-4 months were not dominant factors for the resumption of menstruation. Reducing 44% of the risk of resumption of menstruation was prominent among those who had exclusive breastfeeding

for 5 months. The reducing was prominently increased for 57% among those who had 6 months exclusive breastfeeding mothers compared with mother who did not practice exclusive breastfeeding.

Table 2. Duration of exclusive breastfeeding, contraception use, parity and risk of resumption menstruation

	Resumption of menstruation		Adjusted relative risk*	95% Confidence interval	P
	Not resumed (n=1145)	Resumed (n=927)			
Duration of breastfeeding					
Not exclusive	644	709	1.00	Reference	
Exclusive 0-1 months	248	18	0.55	0.21-1.45	0.231
Exclusive 2 months	93	46	0.75	0.50-1.12	0.156
Exclusive 3 months	63	52	0.81	0.59-1.13	0.213
Exclusive 4 months	48	53	1.06	0.83-1.36	0.644
Exclusive 5 months	29	27	0.55	0.34-0.92	0.022
Exclusive 6 months	20	22	0.43	0.19-0.97	0.044
Contraception use					
None	904	281	1.00	Reference	
Non hormonal	27	54	2.17	1.60-2.94	0.000
Hormonal	214	592	2.61	2.11-3.24	0.000

*Adjusted each other between variables listed on this Table, parity, and mother's formal education

On the other side, current contraception use was increase the risk to be menstruation. Those who were using non hormonal contraception had increased to be menstruation 2.2-fold. In addition, for those who had hormonal contraception methods increase to be menstruation 2.6-fold compared to mothers not using any methods of contraception.

DISCUSSION

Several limitation of the study was: (1) variables in this study limited to this questionnaires; (2) Exclusive breastfeeding determine as the last 24 hours. However, this study was conducted in all (33) province in Indonesia and the interviewer were well trained in nine training centers.

Within a sixth month of postpartum, mothers who give exclusive breastfeeding for 0-4

months were not dominant factors for the resumption of menstruation. Mothers who had exclusive breastfeeding for 5 months reduce 45% the risk of resumption of menstruation. Study in India showed that the chance of resumption of menstruation for such females slowly increases as interval progresses and is considerably higher in 5-6 months interval.⁵

It is known that the fertility inhibiting effect of lactation is linked with the milk let down reflex, which is a direct result of the suckling stimulus. Therefore, the duration and frequency of breastfeeds is an important predictor of the effectiveness of lactation as contraception.³ There is a biological plausibility of the effect of breastfeeding on the delaying of resumption of menstruation and ovulation. Higher duration and frequency of suckling cause stimulation of the hypothalamus, where it causes a local release of beta-endorphin. The higher the

duration and frequency of suckling, the more beta-endorphin is secreted, hence leading to a longer duration of lactation amenorrhea.⁶

On the other side, current contraception use was increase the risk of menstruation. A Cochrane systematic review showed that combined oral contraceptives may reduce the volume of breast milk but not affect the growth of infants.⁷

Combined methods used during lactation may affect breast milk production and therefore may affect infant health and growth. Progestogen-only contraceptive methods have not been shown to affect milk production negatively.⁸ However, in Indonesia, we did not find specific exclusive breastfeeding counselor manual training which contains guidance contraceptive method during exclusive breastfeeding mothers.⁹

Although, the results of this study confirmed that breastfeeding can delay the resumption of postpartum menstruation, nevertheless, breastfeeding alone should not be considered as a method of contraception in over six months postpartum. It is necessary to use modern forms of contraceptive in family planning. Breastfeeding should be viewed not only as a method of birth control but also as the best form of infant nourishment. Efficient contraceptive is the best way to ensure the benefits of breastfeeding, without being endangered by being weaned too early because of a new pregnancy.¹

In conclusion, exclusive breastfeeding for 5 months but not selected contraceptive reduce the risk of resumption of menstruation among women. Health providers and community should be more informed that not to use combined oral contraceptive which contain estrogen in the first six months postpartum.

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