

**THE CORELATION OF THE USE OF HORMONAL  
CONTRACEPTION DEVICES AND BREAST FEEDING PRODUCTION  
IN BREASTFEEDING MOTHERS AT PUSKESMAS REJOSARI  
PEKANBARU**

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**Abstract**

Exclusive breastfeeding for babies aged less than 6 months can reduce the risk of babies experiencing stunting. Children who are exclusively breastfed tend to have better cognitive abilities and are at lower risk of experiencing overweight/obesity and non-communicable diseases as adults. The coverage of 6 month old babies receiving exclusive breastfeeding in 2020 in Riau Province was 43.5%, an increase compared to 2019 (37.21%). This achievement continues to increase but is still below the national target coverage of exclusive breastfeeding for babies in 2021 of 45 %. Factors causing failure to achieve breastfeeding are related to breast feeding production. One of the factors that influences breast feeding production is the use of contraception. This research was conducted to determine whether there is a relationship between the use of contraceptives and breast feeding production. This research is quantitative with a cross-sectional analytical design. The research sample was 91 breastfeeding mothers taken using accidental sampling technique. Data were analyzed using the chi-square statistical test with SPSS software. From the results of the analysis, it was found that 64.4% used progeterone hormone contraception, and 68.1% produced sufficient breast feeding. The results of the chi-square test showed a p value of 0.42. The conclusion obtained is that there is no relationship between the use of contraceptives and breast feeding production

**Keywords:** Hormonal Contraception, Breast Milk Production

**INTRODUCTION**

The development of children's intelligence is closely related to brain growth. The main factor that influences a child's brain is the nutrition they receive during rapid brain growth. In this case, providing nutrition to babies can be done through the process of breastfeeding with breast feeding (ASI). Breast feeding is a fluid secreted by the mother's breast glands in the form of natural food or the best, nutritious and high-energy feeding produced during pregnancy (Wiji 2013)

Lancet (2013) in Kemenkes RI (2021) states that exclusive breastfeeding for babies aged less than 6 months can reduce the risk of babies experiencing stunting. Children who are exclusively breastfed tend to have better cognitive abilities and are at lower risk of experiencing overweight/obesity and non-communicable diseases as adults..

A 6 month old baby who is exclusively breastfed is a baby up to 6 months old who only gets breast feeding without any other food or fluids except medicine, vitamins and minerals from

birth. Coverage of 6 month old babies receiving exclusive breastfeeding in 2020 in Riau Province was 43.5%, an increase compared to 2019 (37.21%) and on average all city districts showed an increase in coverage except Pelalawan, Bengkalis, Rokan Hilir and Dumai (Rahayu, 2021)

This achievement continues to increase but is still below the national target of providing exclusive breastfeeding to babies in 2021 of 45% (Kemenkes RI, 2021)). Exclusive breastfeeding can work well if breast feeding production also runs smoothly. Another term for the breastfeeding process is lactation. The lactation process involves two main reflexes, namely the prolactin reflex and the let down reflex with the main controlling hormones being the hormone oxytocin and the hormone prolactin. The hormone prolactin functions in the production of breast feeding and the hormone oxytocin for the process of producing breast feeding (Bobak, 2004 in Lawrence & Lawrence, 2011 in Rahmawati and Prayogi 2021)

Women who breastfeed will be protected from pregnancy until they begin to ovulate. For most mothers, fertility will begin when they have menstruation. However, oculation can occur beforehand. So a mother does not need to wait to get her period to use contraception (Sortjiningsih 1997)

One factor that can cause a lack of breast feeding production is inappropriate use of contraception. Combination pills containing estrogen and progesterone are generally not recommended as contraception during lactation. Even though very small levels of the drug will enter breast feeding, the less desirable effect is reduced breast feeding production (Sortjiningsih 1997)

The more recommended birth control pills are pills that contain the hormone progestin only. It is known that this type of pill does not have a detrimental effect on the lactation process, especially on its production (Sortjiningsih 1997). Birth control pills are one of the contraceptives used by family planning participants to delay or space out pregnancies. Judging from the data of Profil Dinas Kesehatan Riau, the highest use of contraceptives among postpartum mothers is injections at 60.1%, followed by pills at 24%, the rest use condoms at 6.2%, implants at 5.7% and the rest are IUDs, MOW and MOP (Rahayu 2021)

## RESEARCH METHODS

This research uses a quantitative type of research with an analytical design, using a cross sectional design. The research was carried out in the Rejosari Pekanbaru Health Center Work Area The population in this study were all breastfeeding mothers at the Rejosari Work Health Center, Pekanbaru, because the achievement of exclusive breastfeeding was still below the target, while the use of contraceptives was quite high, using accidental sampling technique with a total sample of 91 people. The variables in this research are contraceptives as the independent variable and breast feeding production as the dependent variable. The data used is primary data. Data processing was carried out using univariate and bivariate analysis with the chi-square test

## RESEARCH RESULT

Based on the results of research conducted on the relationship between the use of contraceptives and breast feeding production in the Puskesmas Rejosari Pekanbaru Work Area, the following results were obtained:

Tabel 1. Frequency Distribution of Hormonal Contraceptive Use among Breastfeeding Mothers in Puskesmas Rejosari Work Area, Pekanbaru

No	Penggunaan alat kontrasepsi Hormonal	Frekuensi (N)	Persentasi (%)
1	Kombinasi	33	35,2
2	Progestin	59	64,8
	Jumlah	91	100

Based on table 1, of the 91 respondents, the majority of respondents used progestin ontraceptives, 59 people (64.8%).

Tabel 2. Frequency Distribution of Breast feeding Production among Breastfeeding Mothers in Puskesmas Rejosari Pekanbaru Working Area

No	Produksi ASI	Frekuensi (N)	Presentasi (%)
1	Cukup	62	68,1
2	Kurang	29	31,9
	Jumlah	91	100

Based on table 2, the majority of 91 respondents produce breast feeding enough for 62 people (68.1%).

Tabel 3. The Relationship between the Use of Hormonal Contraception and Breast feeding Production in Breastfeeding Mothers in Puskesmas Rejosari Work Area, Pekanbaru

Penggunaan alat kontrasepsi	Produksi Asi				Total		<i>P Value</i>
	Cukup		Kurang				
	N	%	N	%	N	%	
Kombinasi	24	75,0%	8	25,0%	32	100%	0,42
Progestin	38	64,4%	21	35,6%	59	100%	
Jumlah	62	68,1%	29	30,9%	91	100%	

Based on table 3, it can be seen that of the 32 respondents who used combined hormonal contraceptives, 75.0% had sufficient breast feeding production and 25.0% had insufficient breast feeding production, and of the 59 respondents who used progestin/non-hormonal contraceptives, 64.4% had sufficient breast feeding production and 35. 6% less breast feeding production. The statistical test results obtained a p value of 0.42, so  $H_0$  was accepted. So it can be concluded that there is no relationship between the use of hormonal contraceptives and breast feeding production.

## DISCUSSION

The process of releasing breast feeding, initiated or stimulated by the baby's mouth sucking on the mother's nipple, is called breast feeding production. Breast feeding productivity can be increased starting from early pregnancy. During pregnancy, the hormone prolactin from the placenta increases but breast feeding usually does not come out due to high levels of the hormone estrogen (Rahmawati and Prayogi, 2021)

On the second or third day after delivery, estrogen and progesterone levels drop drastically, so that the influence of prolactin is more dominant and this is when breast feeding secretion begins to occur. By breastfeeding the baby early, the nipples are stimulated, prolactin is formed by the pituitary, so that breast feeding secretion becomes smoother. Various nutritional intake and special supplements for pregnant women are one way to increase breast feeding production (Ambarwati, 2010)

The results of research conducted by researchers from 91 respondents showed that 62 people (68.1%) had sufficient breast feeding production. Sufficient breast feeding production can be caused by the nutritional intake and supplements of pregnant women being met, the mother having self-confidence, getting enough rest and not being tired, achieving a relaxed, calm, not tense and anxious atmosphere, making the breast feeding supply system function well, and the mother getting support from partners and family so that breast feeding production runs smoothly. And to know that breast feeding production is sufficient, mothers must know the signs of sufficient breast feeding, for example the baby sleeps soundly, the baby's weight will increase by 200-250 grams per week, the baby will often urinate 6-8 times a day, the breasts will feel soft after breastfeeding (Varney 2011)

The choice of using contraception to delay pregnancy, especially when breastfeeding, is a factor that mothers must understand, both the type of contraception and the effects it causes so that the goal of using contraception is achieved without having a negative impact on the baby. Improper contraception can affect breast feeding production. As stated by Haryono and Setyaningsih in Safitri (2016), the use of estrogen and progesterone contraceptives is associated with a decrease in the volume and duration of breast feeding, whereas if the contraceptive only contains progesterone there is no impact on the volume of breast feeding.

Manuaba (2007) in Pranajaya.(2013) states that the hormone estrogen can reduce the action of prolactin so that breast feeding production decreases, while the hormone progesterone can

reduce the synthesis of alpha lactobulin which can result in the formation of sugar breast feeding and reduced breast feeding secretion.

Several research results show that there is a relationship between the use of hormonal contraceptives and breast feeding production, such as research conducted by (Susianty, Yulita, and Fitria, 2021) which states that there is a relationship between hormonal contraception and breast feeding production in breastfeeding mothers with a p-value of 0.018. Likewise, research by Alifariki, Kunan, and Afrini (2020) states that there is a relationship between contraception and breast feeding production in the Poasia Health Center Work Area, Kendari City with a p-value of 0.004.

However, from the results of this study, it was found that there was no relationship between the use of hormonal contraceptives and breast feeding production in breastfeeding mothers in Puskesmas Rejosari working area with a p value of 0.42. This research is in line with research by Husna and Rahmi (2020) which states that there is no significant relationship between the adequacy of breast feeding and the use of progestin contraception in the Indra Puri work area, Aceh Besar Regency with a p value of 0.403. Where mothers who use progestin contraception are 0.5 times more likely to have less breast feeding than mothers who do not use progestin contraception.

This can be caused by other factors that influence breast feeding production. Sambas, Amelia, and Hersoni (2022) stated that the effect of hormonal contraceptives containing estrogen and progesterone on breast feeding production in breastfeeding mothers inhibits breast feeding production and volume. However, there are other factors that can influence breast feeding production, namely the mother's nutritional intake while breastfeeding her baby, birth weight, mental peace and stress, cigarette consumption, alcohol consumption, the mother's diet, support from her husband and other family, breast care, the frequency of baby sucking and the frequency of breastfeeding. Breastfeeding Pranajaya (2013) from the results of his research also concluded that there are 7 variables related to breast feeding production, namely parity, the birth process, use of contraceptives, prelacteal feeding, breast care, frequency of breastfeeding and maternal nutrition.

### **CONCLUSIONS AND SUGGESTIONS**

This research can be concluded that there is no relationship between the use of hormonal contraceptives and breast feeding production in breastfeeding mothers in the Rejosari Community Health Center Work Area, Pekanbaru.

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