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The Effect of Hypnobreastfeeding on Milk Production in Stunting Prevention Efforts in North Tapanuli District

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Abstract: Indonesia is still facing nutrition problems that affect the quality of human resources. The problem of malnutrition is still quite high in Indonesia, especially the problem of stunting. Stunting can occur as a result of malnutrition, especially during 1000 HPK. The Lancet Breastfeeding 2016 states that breastfeeding can reduce infant mortality due to infection by 88%, besides that breastfeeding also contributes to reducing the risk of stunting in the future. Hypnobreastfeeding helps mothers ensure that they can continue to breastfeed, at least exclusively for the first six months. To prevent stunting, optimizing breastfeeding with Hypnobreastfeeding can reduce stunting rates in the North Tapanuli Regency so that the Sustainable Development Goals (SDGs) target in 2025 can be achieved by a 40% reduction. The study aims to determine the difference in prolactin hormone levels before and after the application of hypnobreastfeeding in breastfeeding mothers. The research was a quasi-experiment using pre and Post-tests with a control group design. The sampling technique used purposive sampling on postpartum mothers with a total sample of 30 people. This research was conducted in July-November. Statistical tests using the Wilcoxon test. To determine the difference in prolactin levels before and after hypnobreasfeeding, the p-value = 0.02, so that the p-value <0.05 can be concluded that there is a difference in prolactin hormone levels before and after the application of hypnobreastfeeding in nursing mothers. Based on the results of the study, hypnobreastfeeding can be an intervention for breastfeeding mothers to succeed in exclusive breastfeeding.

Keywords: Hypnosis; Hypnobreasfeeding; Milk production

Introduction

Indonesia still faces nutrition problems that have a serious impact on the quality of human resources (HR). One of the problems of malnutrition is still quite high in Indonesia, especially the problem of stunting and wasting in toddlers as well as the problem of anemia and Chronic Energy Deficiency (CED) in pregnant women. Stunting can occur as a result of malnutrition, especially during 1000 HPK (Setiawan et al., 2022). Stunting will affect the child's intelligence level and health status as an adult (Walker et al., 2015). The consequences of malnutrition at 1000 HPK are permanent and difficult to correct. There is no research that says heredity plays a more important role than nutrition in a child's physical growth. People, in general, think that physical growth is entirely influenced by heredity. This misunderstanding often hinders the socialization of stunting prevention, which should be done by fulfilling nutritional needs from the womb until the age of two (Elyta et al., 2023). Socialization continues to be carried out. However, it also requires the willingness of the community to accept this, followed by awareness of the obligation to maintain health.

Method

The method contains an explanation This study is a Quasi experiment using pre and Post-tests with a control group design (Stratton, 2019). In this design, prolactin hormone levels were measured in breastfeeding mothers on the eighth day Postpartum, the examination

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was carried out in the morning two hours after breastfeeding. Hypnobreastfeeding treatment was carried out starting on the eighth day after measuring prolactin hormone levels. Hypnobreastfeeding treatment for seven days, conducted twice a day when the mother is in a relaxed and relaxed state, or highly concentrated on one thing, namely the process of breastfeeding by listening to positive affirmation music. On the fifteenth Postpartum day, prolactin hormone levels were re-measured. The population in this study were breastfeeding mothers in the working areas of Puskesmas Siatas Barita, Hutabaginda, Onan Hasang, Sarulla, and Situmeang Habinsaran totaling 30 respondents.

Result and Discussion

The results of the data normality test using Shapiro-Wilk (sample <50) obtained the results of p=0.045 so that the p-value <0.05, so it is said that the data is not normally distributed. To determine the difference in prolactin levels before and after hypnobreasfeeding using the Wilcoxon test. The results of the Wilcoxon test obtained a p-value = 0.018 so that the p-value <0.05 can be concluded there is a difference in prolactin hormone levels before and after the application of hypnobreastfeeding in breastfeeding mothers in the Siatas Barita, Hutabaginda, Onan Hasang, Sarulla, Situmeang Habinsaran Health Center Working Area.

Hypnobreastfeeding itself comes from two words, hypnos and breastfeeding (Hutabarat & Sihombing, 2021). Hypnos comes from the Greek word which means sleep mind. Breastfeeding is the process of breastfeeding. So, the definition of hypnobreastfeeding is a natural effort to use subconscious energy so that the breastfeeding process runs comfortably, and smoothly, and the mother can produce sufficient milk for the baby's growth and development needs (Farida et al., 2023). The trick is to enter positive affirmation sentences that help the breastfeeding process when the mother is very relaxed or very concentrated on something (hypnotic state) (Laily et al., 2021). The main benefit of hypnobreastfeeding is of course to increase milk production and flow. However, there are other benefits such as increasing the calmness of the father and mother so as to create a harmonious family and create a positive environment for the baby. The way hypnobreastfeeding works is to reduce anxiety and stress in mothers so as to increase milk production, eliminate anxiety and fear so that mothers can focus on positive things, and increase maternal confidence, thus making mothers feel better and confident in their role as a mother. Examples of positive affirmation sentences for breastfeeding mothers: Mom is getting calmer and more relaxed, all cells, organs, and hormones work in balance, breast milk production is optimal for baby's needs, breast milk flow is smooth, baby grows and develops healthily and intelligently, both physically and mentally."

Every time the baby sucks the breast, it stimulates the sensory nerve endings around the breast to stimulate the front pituitary gland to produce prolactin (Hendriyani et al., 2019). Prolactin will enter the bloodstream and then into the breast causing secretory cells in the alveolus (breast milk factory) to produce milk. Prolactin will be in the blood circulation for 30 minutes after being sucked, so prolactin can stimulate the breast to produce breast milk for the next drink (Kim, 2020). As for the current drink, the baby takes the milk that is already there. The more milk released from the milk storehouse (lactiferous sinus), the more milk production. In other words, the more often the baby suckles, the more milk is produced. On the other hand, the less often the baby sucks, the less milk the breast produces. If the baby stops sucking, the breast will stop producing milk. Prolactin is generally produced at night, so breastfeeding at night can help maintain milk production. Prolactin also suppresses ovulation (the function of the ovaries to produce eggs), so exclusive breastfeeding will slow the return of fertility and menstrual function. Therefore, breastfeeding at night is important for the purpose of delaying pregnancy (Bruno Tongun et al., 2018).

Prolactin is a peptide hormone produced by the anterior pituitary (Freeman et al., 2000). Prolactin is the key hormone to initiate and maintain milk secretion (Ni et al., 2021). The receptors on the nipple, when stimulated by the baby's suction, will cause impulses to be sent to the vagus nerve and continue to the hypothalamus (Jurek & Neumann, 2018). The hypothalamus stimulates the anterior pituitary to secrete prolactin which causes milk production by the mammary alveoli (Rezaei et al., 2016). Prolactin levels in breastfeeding mothers will normalize 3 months after delivery until weaning the child and at that time there will be no increase in prolactin despite the baby's suction, but milk production continues (Athonvarangkul & Wysolmerski, 2023).

Based on Wati et al. (2023), serum prolactin levels in breastfeeding mothers are influenced by the nutritional status of breastfeeding mothers. This study is in line with several research results which convey that there are several benefits of applying hypnobreastfeeding for mothers during their lactation period including increasing breast milk production, and the success of exclusive breastfeeding. Research by Franciska et al. (2023), conveyed that there is an effect of hypnobreastfeeding on milk production in working breastfeeding mothers. The research was conducted

with a one-group pretest-posttest design. The sample was taken by consecutive sampling and obtained from 25 working breastfeeding mothers. Hypnobreastfeeding was done independently after being given 1 workshop and done every day at least 2 times a day before breastfeeding (Asih, 2020). Breast milk production was measured for 7 days before and after hypnobreast feeding using a measuring cup based on the volume of expressed breast milk in a day. The average milk production before treatment was 210 ml/day and after treatment was 255 ml/day.

The research was conducted by Adilla et al. (2023), T using a quasi-experimental method with a non-randomized clinical trial sampling technique on pregnant women in the third trimester with a total of 57 mothers, divided into 27 mothers who underwent hypnobreastfeeding, and 30 mothers who did not receive hypnobreastfeeding. The results showed that the hypnobreastfeeding group was predicted to influence the success of exclusive breastfeeding by 7% (R2=0.07) compared to the non-hypnobreastfeeding group and the magnitude of the effect of hypnobreastfeeding was 3.11 times greater than without hypnobreastfeeding with a value of OR=3.11 (95%, CI: 1.04-9.30), with p<0.05. Hypnobreastfeeding has a positive effect on the success of exclusive breastfeeding. In the hypnobreastfeeding group, exclusive breastfeeding was higher than in the group without hypnobreastfeeding (Sundari & Imaniar, 2021). Research by Nor Aini et al. (2017), stated that hypnobreastfeeding and oxytocin massage can increase maternal breast milk production in the postpartum period.

This study used a Quasi-Experimental design with a pretest-posttest control group design with a purposive sampling technique, from 52 mothers in the postpartum period divided into 4 groups. Research conducted by Hesti et al. (2017) et al on the combination of oxytocin massage and black cumin capsules to increase prolactin hormone levels in postpartum mothers with cesarean section. Quasi-experimental research method non-randomized controlled trial design, pretest-posttest control group (De Allegri et al., 2019). Postpartum subjects with cesarean section with purposive sampling. The results showed that there was a difference in prolactin hormone levels before and after oxytocin massage (p=0.00). There is a difference in prolactin hormone levels before and after being given black cumin capsules (p=0.00). There is a difference in prolactin hormone levels before and after being given a combination of oxytocin massage and black cumin capsules (p=0.000). The most effective conclusion to increase prolactin hormone levels is the combination of oxytocin massage and black cumin capsules (Machmudah et al., 2020).

Research by Ayu et al. (2022) to test the combined effect of oxytocin massage and hypnobreastfeeding to determine uterine involution and prolactin levels in breastfeeding mothers. Respondents were 20 people each for the treatment group and control group. The result of this study is that there is a significant difference in the treatment group demonstrated by Emilda et al. (2020) the combination of oxytocin massage and hypnobreastfeeding, on uterine involution and increased prolactin levels so that it can be used as a reference when providing obstetric care to postpartum mothers.

Conclusion

The p value = 0.018, so the p value <0.05 can be concluded that there is a difference in prolactin hormone levels before and after the application of hypnobreastfeeding in breastfeeding mothers. The application of hypnobreastfeeding is very helpful for breastfeeding mothers in milk production so that it can help mothers succeed in exclusive breastfeeding. Suggestions that can be given to health workers are to socialize hypnobreast feeding to breastfeeding mothers to succeed in exclusive breastfeeding. For mothers who breastfeed to provide nutrition (exclusive breastfeeding) Immunoglobulin which functions for the baby's immunity can only be found in breast milk. Exclusive breastfeeding provides many benefits for babies including: the composition of breast milk according to the needs of the baby, calories from breast milk meet the needs of the baby until the age of six months, faster psychomotor development, supporting cognitive development, supporting vision development , strengthening the inner bond between mother and child and the basis for the development of a confident personality and using the primaku application to monitor their own baby's growth and development.

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Author Contributions

Conceptualization, E. S. S, J. L. S.; methodology, E. S. S.; validation, J. L. S. and E. S. S.; formal analysis, J. L. S.; investigation, E. S. S. and J. L. S.; resources, E. S. S.and J. L. S.; data curation, E. S. S.: writing—original draft preparation, J. L. S and E. S. S.; writing—review and editing, J. L. S.: visualization, and E. S. S.and J. L. S. All authors have read and agreed to the published version of the manuscript.

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Conflicts of Interest
The authors declare no conflict of interest.

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