

# Nutrition Counselling in Pregnant Women Until Breastfeeding to Overcome Stunting

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## ABSTRACT

One of Indonesia's health programs is to improve the health and nutrition status of mothers and children. The problem of stunting children is still encountered in the 4.0 revolution era. The author is interested in solving this problem by conducting a nutritional counselling intervention research on breastfeeding pregnant women about exclusive breastfeeding. The general objective of this study was to determine differences in stunting status of two-month-old infants from pregnant to lactating mothers who received individual and group nutritional counselling in South Minahasa Regency. The results of this study and supported by other studies indicate that in order to improve the knowledge and attitudes of subjects about exclusive breastfeeding it needs to be supported by various factors. Counselling is not the only way used to improve knowledge and attitudes. Conclusions There are no significant differences in knowledge and attitudes, but there are significant differences regarding the exclusive breastfeeding behaviour of the treatment and control groups.

*Keywords: nutrition, counselling, pregnant, breastfeeding*

## INTRODUCTION

The development of nutritional problems in Indonesia is increasingly complex now, aside from still facing the problem of malnutrition, the problem of overnutrition is also an issue that we must deal with seriously. The results of Riskesdas from 2007 to 2013 showed an alarming fact where underweight increased from 18.4% to 19.6%, stunting also increased from 36.8% to 37.2%, while wasting (thin) decreased from 13.6 % to 12.1%.

In Indonesia, around 37% (nearly 9 million) of children under five are stunted (Riskesdas 2013) and throughout the world, Indonesia is the country with the fifth-highest prevalence of stunting. Toddler / Baduta (babies under the age of two years) who experience stunting will have a level of intelligence that is not optimal, making children more vulnerable to disease and in the future can be at risk of decreasing levels of productivity. In the end, stunting will be able to hinder economic growth, increase poverty and widen inequality [1].

Riskesdas 2013 data, North Sulawesi Province sufferers of malnutrition status 3.7% (National 5.7%) and malnutrition status 12.8% (National 13.9%). Nutrition Status Monitoring Results (PSG) for 2017 in North Sulawesi Province, the nutritional status of stunting toddlers is 31.4% and exclusive breastfeeding coverage is 23.45, South Minahasa and Minahasa Districts are one of the regions with high nutritional stunting status of 37.6% with exclusive breastfeeding coverage of 19.2% [2].

Some of the causes, as explained above, have contributed to the still high prevalence of stunting in Indonesia and therefore a comprehensive intervention plan is needed to reduce the stunting prevalence in Indonesia. Nutrition fulfilment factors play an important role in the human life cycle. Nutritional deficiencies in pregnant women can cause Low Birth Weight Babies (LBW) and can also cause a decrease in intelligence [3].

In infants and children, malnutrition will cause growth and development disorders which if not addressed early can continue into adulthood. Age 0-24 months is a period of rapid growth and development, so it is often termed a golden period as well as a critical period. The golden period can be realized if during this period infants and children obtain appropriate nutrition for optimal growth and development. Conversely, if infants and children at this time do not get food according to nutritional needs, then the golden period will turn into a critical period that will interfere with the growth and development of infants and children, both at this time and the future [4].

To achieve optimal growth and development, in the Global Strategy for Infant and Young Child Feeding, WHO / UNICEF recommends four important things that must be done namely; first giving breast milk to the baby immediately within 30 minutes after the baby is born, second giving only breast milk (ASI) only or exclusive breastfeeding from birth until the baby is 6 months old, third giving complimentary food ASI (MP-ASI) since infants aged 6 months to 24 months, and fourth continue breastfeeding until the child is 24 months or older [5].

Education or counselling is one alternative to improve knowledge and attitudes and help the success of nursing mothers. Mother is part of the family who also plays an important role in improving community nutrition. Mother is one of the targets of appropriate education for community nutrition improvement efforts including increase exclusive breastfeeding coverage. Counselling is one method that is considered to be able to help mothers to increase the coverage of exclusive breastfeeding behavior [6][9]. The psychological preparation of the mother

for breastfeeding during pregnancy is very means, because a positive decision or attitude of the mother must have occurred during pregnancy or even long before the attitude of the mother is influenced by various factors, including customs/habits and beliefs of breastfeeding in their respective areas, previous breastfeeding experiences, knowledge about the benefits of breast milk and pregnancy is desirable or not. Support and doctors/health workers, close friends or relatives are needed, especially for first-time mothers pregnant [7].

Programs targeting 0-6 Breastfeeding Mothers and Children aged 0-6 months include encouraging IMD / Early Breastfeeding Initiation by giving breast milk long / colostrum and ensuring education to mothers to continue to provide exclusive breastfeeding to their toddlers [8]. Related activities include providing childbirth assistance with health workers, Early Breastfeeding Initiation (IMD), promotion of exclusive breastfeeding (individual and group counselling), basic immunization, monitoring growth and development routinely every month, and proper handling of sick babies[9].

From the description of the problem of stunting in North Sulawesi, especially Minahasa Regency, the writer is interested in solving the problem, the writer chooses the method of counselling [10], because with nutritional counselling can provide guidance to pregnant and lactating women, nutritional counselling can also enable the writer to better understand the problems of the mother in depth so that it can haunt mothers to overcome them [11][12].

Besides seeing exclusive breastfeeding behaviour, the writer will also monitor the growth of the baby's height to find out the status of stunting after receiving nutritional counselling. To see the pattern of exclusive breastfeeding and height of a child for this first stage, the authors limit the age of two months. This is because of the limited time, energy and cost to carry out this research. The author intends to monitor the height of a child whose mother is given nutritional counselling during pregnancy and breastfeeding until the age of five so that it becomes an ongoing study (multi-years). Mothers were chosen as nutritional counselling targets because mothers who directly breastfeed their babies.

## **MATERIAL AND METHODS**

This type of research is a Quasi Experiment research, while the research design is a pre-post-test control group. The study was conducted in South Minahasa Regency, North Sulawesi Province. This location was chosen because the stunting rate in 2017 was quite high compared to other regions in North Sulawesi Province ( $> 35$ ). The time of the study is planned to begin in June until October 2018. The target population in this study was pregnant women who were trimester 3 with a gestational age of more than 30 weeks in South Minahasa Regency. The amount is calculated by the formula from Lwanga et al. (1990). Counselling is carried out in stages, namely the disbursement stage, the explanation phase and the stage of problem-solving. The duration of counselling for each subject is about 5-10 minutes and is carried out indoors. To improve the subject's understanding of counselling material, a question and answer session was held between the counsellor and the subject.

Data collection in the field was carried out by researchers, alumni of the Department of Health Polytechnic Kemenkes Manado, and students. Data collectors (enumerators) have previously been trained by researchers on how to measure/collect data in the field. Counselling intervention - carried out by the researcher himself and 3 (three) researchcounsellors/assistants who have previously been trained by researchers. The intention of the researchers to participate in counselling because researchers want to know fully the process that occurs during counselling takes place.

Subject identity data which includes anthropometric data, age, occupation, socioeconomic, parity, and others were obtained using a questionnaire and measured at the beginning of the study. Data on colostrum breastfeeding behaviour were obtained with the interview method and subject record, that is at the beginning of the research subject given a list/form about breastfeeding colostrum (days 1-6) after giving birth. Data on exclusive breastfeeding patterns were collected by 24-hour recall method for four times, namely at the age of one month, two months, three months and four months. Child growth data is obtained by measuring body weight with baby scales / dacin scales and body length with a length measuring instrument bodies made of wood and LLA are measured by the issued LLA tape.

The first step carried out to analyze the data is data by using the SPSS program computer. Data were analyzed descriptively in the form of descriptions, tables, graphs, etc. To test, differences Subject characteristics were performed by chi-square test, t-test and ANOVA.

## **RESULTS**

The number of subjects at the beginning of this study was 64 pregnant women. The subjects were divided into two groups: 32 subjects as a treatment group were given individual counselling and 32 subjects in the control group were given group counselling. Subjects came from 3 Puskesmas areas in South Minahasa Regency, North Sulawesi Proportion. Subjects who received treatment came from the Tareran Health Center and Suluun Health Center while the control came from the Tompas Baru Health Center area.

Characteristics of the subjects in this study include age, education level, occupation, previous breastfeeding history, gestational age at delivery, birth attendants, and place of delivery. The average age of the subjects in the control and treatment groups was 26.78 and 25.72 years. The results of the T-test statistical test with a 95% confidence level showed no difference in the mean age between the treatment and control groups ( $p = 0.419$ ).

The highest level of education in the treatment and control group was SLTA (Upper Senior High School) and PT (Higher Education), namely 29.7% and 25.0%. Statistical test results  $\chi^2$  with a 95% confidence level showed no significant difference regarding the level of education between the treatment and control groups ( $P = 0.419$ ).

The occupation of the subject was mostly IRT (Housewife) ie 43.8% in the treatment group and 40.6% in the control group. Statistical test results showed no significant differences in the type of work between the treatment and control groups ( $P = 0.451$ ). In the treatment group, there were 21.9% and 18.8% in the control group had breastfeeding before the study took place. Statistical test results showed no significant differences regarding the history of breastfeeding between the treatment and control groups ( $P = 0.610$ ).

The average gestational age was higher in the control group compared to the treatment. The results of the T-test statistical test showed that there were significant differences in the average gestational age between the treatment and control groups ( $P = 0.012$ ). most of the respondent's birth attendants were midwives, namely the 45.3% treatment group and 39.1% control. Statistical test results showed no significant differences regarding birth attendance between treatment and control groups ( $P = 0.168$ ). The highest number of delivery places in the treatment group were at the maternity clinic (29.7%) while the control was at the health centre (30.3%).

History of breastfeeding was higher in the control group at 31.3% compared to the control at 28.1%. Statistical test results showed no significant differences regarding the history of breastfeeding between the treatment and control groups ( $P = 0.168$ ). This is possible because the treatment area, especially in the District of Tareran has a fairly representative maternity clinic.

Statistically, the characteristics of the two groups can be said to be homogeneous. The only characteristic that was significantly different was the gestational age ( $P = 0.012$ ). The data showed that subject knowledge about exclusive breastfeeding and maternal and infant health at the start of the study was generally good, at 39.1% in the treatment group and 37.5% in the control group. Statistical test results showed no significant differences about knowledge between the treatment and control groups ( $P = 0.768$ ). The subject's attitude about exclusive breastfeeding and the health of mothers and infants at the start of the study was generally good/supportive at 45.3% in the treatment group. Factors influencing the subject to provide exclusive breastfeeding for up to 4 months.

The results of statistical analysis showed no significant differences in the factors affecting subjects for exclusive 4-month breastfeeding between the treatment and control groups ( $P = 0.780$ ). The results of the statistical analysis  $\chi^2$  with a confidence level of 95%, showed no significant differences about the factors affecting subjects for exclusive breastfeeding for 4 months ( $P = 0.087$ ). The subject's knowledge is generally good (95.3%) and no one is lacking knowledge. Statistical test  $\chi^2$  with a 95% confidence level showed no significant difference in the knowledge of the treatment and control groups ( $P = 0.554$ ). The effect of counselling on attitudes about breastfeeding and the health of mothers and infants. The attitudes of highly supportive subjects for exclusive breastfeeding were higher in the treatment group (20.3%) than in controls (9.4%). Statistical test  $\chi^2$  with a 95% confidence level showed no significant difference in attitudes between the treatment and control groups ( $P = 0.055$ ). In accordance with the results of statistical analysis, the authors do not see any difference in meaning.

## DISCUSSION

In Tanjungsari Subdistrict, only 39.9% of newborns weighing less than 2500 grams were given exclusive breastfeeding for 4 months and 48.0% who weighed more than 2500 grams [13]. In Purworejo the percentage of mothers who gave food other than breast milk before the age of 4 months was 76.3% in the group given IEC interventions and 74.3% in controls. In urban areas of Yogyakarta mothers who exclusively breastfeed for 4 months were only 28% and in rural areas 30% [14].

The most dominant factor for subjects to provide exclusive breastfeeding until the age of 4 months in the treatment group is so that the baby becomes healthy and for the baby's growth (39.5%). Another factor (abundant ASI and health advice) in the control group was 23.7%. The above factors, for example, so that the baby is healthy and health recommendations are also found in Soenarto's research [15]. The research method used is DKT (focus group discussion) and in-depth interviews. The same thing also stated by Suharyono [16] that exclusive breastfeeding must be given to infants because the composition of breast milk is very suitable for babies and the presence of protective factors in breast milk. Other factors that encourage mothers to give exclusive breastfeeding are not causing allergies, do not need to be purchased, and provide psychological benefits [17].

Factors influencing subjects not to give exclusive breastfeeding for up to 4 months can be seen. Data shows that there were 26 subjects who did not give exclusive breastfeeding for 4 months and 19 (73, 1%) of them were registered in the control group. The factor that caused exclusive breastfeeding for less than 4 months in the treatment group was lack of breast milk [18]. Other factors (whiny babies and working mothers) were more common in the control group. The results of statistical analysis showed no significant differences in the factors affecting

subjects for exclusive 4-month breastfeeding between the treatment and control. These factors are also found in research Soenarto [19]. Breast health problems, lack of milk syndrome, infants groups (P confused nipples, whiny babies, babies not gaining weight, working mothers are also factors causing mothers not to give exclusive breastfeeding 4 months [20].

## CONCLUSION

There was no significant differences about the knowledge, attitudes, regarding the exclusive breastfeeding behavior, in weight gain based on KMS of the treatment and control groups but there was the significant difference between weight gain based on KMS with exclusive breastfeeding behavior.

## CONFLICT OF INTEREST

It is necessary to study with a larger sample and in an expanded location using an exclusive breastfeeding module. This research can be used as teaching material for institutions in an effort to improve maternal and child health. In addition, the government, especially the policy makers, always give examples of exclusive breastfeeding, consume balanced healthy food, and facilitate extension workers and extension media

## SOURCE OF FUNDING

Budget Implementation Entry List (DIPA) 2018

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