

# Colostrum Feeding is Examined Throughout the Labor Period at Kediri City's Pesantran II Health Center

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## ABSTRACT

The factors that affect the length of labor can be known in this case so that they can increase their awareness and at the same time handle it well, so that the birth can go well and the baby can colostrum immediately. In all, 60% of women who underwent difficult labor said that this experience would impact them for the rest of their lives. The purpose of this study was to ascertain how the administration of colostrum and labor duration at Kediri City's Pesanren II Community Health Center related to one another. The study employed a cross-sectional method using observational research as its research design. 15 expectant moms were included in the sample using the purposeful sampling technique. Spearman's rho, a statistical test, is employed.

**Keywords:** colostrum, feeding, prolonged labor

## BACKGROUND

Colostrum is an important part of breast milk to be given in a baby's first life, because colostrum contains immune substances, especially immunoglobulin (IgA) to protect babies from various infectious substances and these substances will not be found in subsequent breast milk or in formula milk. The composition of breast milk is not the same from time to time and is divided into three, namely colostrum, transitional breast milk and mature breast milk (Khairuniyah, 2011). The problem that Indonesian mothers often encounter is the wrong habit of breastfeeding their babies, namely giving breast milk that is already white and the thick yellow liquid or colostrum is discarded because it is thought to cause stomach ache, therefore before the mature milk (ASI) comes out, the baby is given Substitute foods such as sugar water and honey, as a result of this lack of understanding, are detrimental to the baby's health (Aminah, 2012).

Statistics 2019 from UNICEF (United Nations International Children's Emergency Fund) shows that only 3% of moms nursed their children exclusively. The 2017 SDKI (Indonesian Health Demographic Survey) found that while the percentage of mothers who breastfeed their kids remains at 53.5%, only 9% of them do so an hour after giving birth, and 51.7% do so on the first day following delivery.

According to data from the 2017 Indonesian Demographic and Health Survey (SDKI), 35% of newborns did not receive breast milk on the first day following delivery, while 49% of babies received it within the first hour of life. Coverage of exclusive breastfeeding for six months came to 41.5%. According to the 2016 Nutritional Status Monitoring (PSG) data, 51.9% of newborns received IMD; 42.7% of these babies had it within an hour after birth, and 9.2% of babies received it within an hour or more. In reality, early breastfeeding increases the likelihood that a mother will breastfeed her child exclusively by two to eight

times, thereby preventing the approximately 21,000 newborn fatalities in Indonesia (those under 28 days of age).

Based on data from districts/cities, it is known that the coverage of babies receiving exclusive breastfeeding in East Java in 2020 was 61.0% (Attachment to East Java Health Profile Data). This coverage has decreased compared to 2019 (68.2%). This decrease was due to the Covid-19 pandemic which caused the number of targets examined to decrease. However, if this coverage is above the 2020 RPJMN target, which is 40%, description of the coverage of exclusive breastfeeding for babies (East Java Health Profile, 2020). The achievement of exclusive breastfeeding in the Health Service Work Area in Kediri Regency in 2019 was 55.2%, in 2020 it was 59.2% and in 2021 it was 54.9% (Kediri Regency Health Profile, 2020).

The factors that influence the provision of colostrum to postpartum mothers are influenced by various factors, both from the mother herself and external factors. Maternal factors include the mother's level of knowledge, health condition, attitude, parity and perception, while external factors include the support of those closest to her, health workers and the culture of the environment where the mother lives. The factors that hinder the provision of colostrum (ASI) are influenced by the mother's lack of knowledge regarding the advantages of colostrum (ASI) and the physiology of lactation, the mother's lack of physical and mental preparation, lack of family support, lack of environmental support (Maryunani, 2012). Some opinions say that what prevents breastfeeding mothers from giving colostrum immediately (it takes a long time to give colostrum), including fear of the baby getting cold, the mother being too tired to breastfeed her baby immediately, colostrum not coming out or the amount of colostrum being inadequate, and also some opinions and research saying that giving colostrum can be influenced by the mother's level of knowledge (Farida, L. Marni, in Jumriani, 2017).

For mothers, it can cause feelings of restlessness, fatigue, which causes an increase in body temperature, pulse rate and breathing. Mothers are at risk of experiencing meteorism (flatulence), swelling of the cervix or vulva, dehydration, infection, pain in the lower part of the uterus, and at the end of labor there is a risk of rupture. uterus (loose uterus), as well as death due to bleeding or infection (Manuaba, 2010).

Preparatory steps for mothers to be ready to breastfeed by getting encouragement that every mother is able to breastfeed her baby. It is explained to mothers that childbirth and breastfeeding are natural processes, almost all mothers successfully undergo them. The support of health workers in this case is expected to be able to carry out their role as optimally as possible to facilitate and guide mothers, including the management of the postpartum mother's room which can support the provision of colostrum to newborn babies. Apart from that, it can also be in the form of providing information through education and counseling about the benefits of colostrum. (Astuti, D. 2015).

## **METHODS**

### **Concept of Theory**

Typically, mothers who give birth have the chance to provide colostrum. Naturally, the assistance of medical professionals and other family members is necessary for moms who give birth via caesarean section in order to give the newborn colostrum (Anggraini, and Sutomo, 2010: 20). Yellowish-colored and viscous, colostrum has a stronger yellow hue than fully mature milk. Because it contains live cells, such as white blood cells that can destroy pathogens and cause sickness, colostrum, often known as a thin, golden liquid, is yellow in color (though it can also be clear). It resembles blood more than milk (Haryono, and Setianingsih, 2014: 17). Babies must therefore be given colostrum. The baby's intestines are lined with colostrum, which shields them from bacteria.

### Colostrum Function

The function of colostrum is to provide nutrition and protection which consists of the following substances:

- 1) Immunoglobulin, to coat the intestinal wall which functions to prevent the absorption of proteins that might cause allergies (Astutik, 2014: 36). Compared to mature breast milk whose main protein is casein, in colostrum the main protein is globulin so that it can provide the body's protection against infection (Marmi, 201: 15).
- 2) Lactoferrin is a protein that has a high affinity for iron. The highest levels of lactoferrin in colostrum and breast milk are in the first 7 days postpartum. The low iron content in colostrum and breast milk will prevent the development of pathogenic bacteria (Astutik, 2014: 36).
- 3) Lysosomes function as anti-bacterials and inhibit the growth of various viruses. The levels of lysosomes in colostrum and milk are much greater than in cow's milk (Astutik, 2014: 36).

### RESULTS

The Pesantren II Health Center's working area spans 1,421 m<sup>2</sup> of land and 421.5 m<sup>2</sup> of building space, and it is situated in the Pesantren District east of Kediri City. There are several ways to get from one subdistrict to another or between subdistricts: public transportation, two or four-wheeled vehicles, etc. Six subdistricts Burengan Subdistrict, Jamsaren Subdistrict, Pakunden Subdistrict, Singonegaran Subdistrict, Tinalan Subdistrict, and Tosaren Village are included in the Pesantren II Health Center's service area. and furnished with three Poskeskel facilities Poskeskel Tinalan, Poskeskel Tosaren, and Poskeskel Pakunden as well as four auxiliary health centers, Pustu Burengan, Pustu Kleco, Pustu Grogol, and Pustu Dadapan. Regarding the borders of the work area.

Age	Frequency	Percent
< 17 Years	3	20.0
17-25 Years	9	60.0
25 - 35 Years	3	20.0
Amount	15	100.0

Based on table 4.1, it is known that the majority of respondents aged 17-25 years were 9 people (60%) out of 15 respondents.

#### Characteristics of Respondents Based on Education

Education	Frequency	Percent
Junior High School	4	26.7
Senior High School	7	46.7
College	4	26.6
Amount	15	100.0

### DISCUSSION

#### Giving Colostrum

12 out of the 15 respondents, or 80%, fed colostrum to babies, according to the findings of a study on the practice. Six respondents (40%) who were between the ages of 17 and 25 were found in a cross-tabulation between the age of mothers giving birth at the Islamic Boarding School Health Center and the availability of colostrum. A cross-tabulation of colostrum provision and education reveals that 7 individuals (46.7%) completed high school. The findings of this study are helpful in providing moms with the first colostrum after giving birth. Colostrum fed babies have stronger immune systems than non colostrum fed babies.

Colostrum is breast milk that comes out first after the mother undergoes the birth process. Colostrum has a different color and texture from breast milk. If breast milk is white and has a

liquid texture, colostrum has a slightly yellowish color and has a slightly thicker texture than breast milk. Colostrum contains protein and vitamin A, as well as other nutrients such as carbohydrates, fat, vitamin C, vitamin D and vitamin B complex which are good for fulfilling the nutrition of newly born babies. Consuming colostrum will also help babies eliminate their first feces (Nina R, 2019).

Several factors influence the provision of colostrum, namely maternal, infant, social support and other factors. Maternal factors are age, education, employment, parity, knowledge, surgical wound pain, fluid intake, smoking, drinking alcohol, anxiety, motivation (Soetjningsih, 2012). Baby factors are birth weight, health status, abnormalities, baby sucking (Bobak, 2015). Social support, namely family and husband support, information about breast milk (Mardiah et al, 2015). Other factors are early breastfeeding, night breastfeeding, frequency & duration of breastfeeding, methods that can facilitate breastfeeding, breastfeeding programs (Roesli, 2014). The mother's age greatly determines maternal health because it is related to the conditions of pregnancy, childbirth and postpartum, as well as parenting methods as well. breastfeeding her baby.

Mothers who are less than 20 years old are still immature and not ready physically and socially to face pregnancy, childbirth, and to care for the baby at birth. Meanwhile, mothers aged 20 -35 years are referred to as adulthood and also known as the reproductive period, where during this period it is hoped that people will be able to solve the problems faced emotionally calmly, especially in dealing with pregnancy, childbirth, postpartum, and take care of the baby later. (Arini, 2012). The research results of Astri and Dian (2011) stated that several factors that influence the provision of colostrum are education and income. The research results of Desti et al (2015) stated that there was a relationship between the level of knowledge of postpartum mothers about colostrum and their motivation to give colostrum.

From the results of this research, many breastfeeding mothers can give colostrum to babies. Mothers' understanding of colostrum is very good so they can easily overcome obstacles in giving colostrum. In mothers who give birth, there are many problems with the nipples not producing colostrum, swollen nipples, and sore nipples so that the baby does not get colostrum properly.

## **CONCLUSION**

The Pesantren II Health Center's working area spans 1,421 m<sup>2</sup> of land and 421.5 m<sup>2</sup> of building space, and it is situated in the Pesantren District east of Kediri City. There are several ways to get from one subdistrict to another or between subdistricts: public transportation, two or four-wheeled vehicles, etc. Six sub-districts Burengan Village, Jamsaren Village, Pakunden Village, Singonegaran Village, Tinalan Village, and Tosaren Village are included in the Pesantren II Health Center's service area and furnished with three Poskeskel facilities Poskeskel Tinalan, Poskeskel Tosaren, and Poskeskel Pakunden as well as four auxiliary health centers, Pustu Burengan, Pustu Kleco, Pustu Grogol, and Pustu Dadapan.

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