FACTORS OF STUNTING FROM MOTHER'S PREGNANCY TO TODDLER UNDER 59 MONTHS-OLD

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ABSTRACT
Stunting is a chronic condition caused by malnutrition in the long term, causing stunted growth in children. Lack of nutritional intake in the long term will cause the growth of height in children to be shorter than the standard age. Factors that cause stunting in children include malnutrition during the mother's womb, genetic factors, lack of exclusive breastfeeding, infection factors, and the age of the baby. This study uses a literature study research method, while data collection techniques are carried out by exploring journals and other information relevant to the study. The results of this study indicate that the main factor that is the focus of research on the causes of stunting during pregnancy and after delivery is the condition of Low Birth Weight Babies (LBW) caused by lack of nutritional intake during childbirth, and the lack of optimal exclusive breastfeeding after childbirth.

INTRODUCTION
Stunting is a chronic condition that causes stunting in children caused by lack of nutritional intake in children both in the womb and postpartum, especially in the last 1000 days of life. According to UNICEF (2012), Stunting is one of the chronic nutritional indicators that describes stunted growth in children due to malnutrition in the long term. Unbalanced nutritional intake is one of the factors that directly affect stunting, especially in the first 1000 days of life.

The period of the first 1,000 days of life counts from 270 days during the mother's pregnancy, up to 730 days in the first life of the baby born. This period is a sensitive period and very important, so it is called the golden period. This is because the impact that can arise when children's needs are not met will be permanent and cannot be corrected. The impact is not only on physical growth, but also on cognitive and mental development (Sulistyaningsih, 2011). The nutritional status of a pregnant woman is very important to pay attention to because it has a direct impact on the fetus in the womb. If the initial nutritional status of the fetal life is deficient, it will cause inhibited fetal development (PJT), Low Birth Weight Babies (BBLR), small, short, thin, low endurance and risk of death (Zaif et al., 2017).

The impact of stunting not only occurs in the inhibition of the growth of children's short height (dwarf) but also affects the development of brain cells, so that their cognitive abilities and ingenuity decrease (Allen & Gillespie, 2001; Crookston et al., 2010). This opinion is in line with the opinion of Trihono (2015) who stated that the impact of stunting not only affects impaired physical growth, but will also affect brain growth and development patterns, toddlers who experience stunting as adults will easily contract chronic diseases such as cancer, diabetes, stroke, hypertension, etc. In addition, the impact of stunting can cause damage to children's growth and
development and cannot be changed, the child will never be able to learn and gain as much potential as he should have.

Based on the opinions of experts, it can be concluded that stunting is a malnutrition condition that occurs in children starting from the gestation period of the mother to toddler which has a permanent impact on inhibiting the physical growth of children's height categorized into stunts. In addition, another reaction that arises in the body due to stunting is the increased risk of degenerative diseases, such as cancer, obesity, diabetes, and coronary heart disease in adulthood. If the problem of stunting is not overcome, there will be more and more young generations of Indonesia in the future who are short or even unqualified. Therefore, the research attempted to analyze factors of stunting from mother's pregnancy to toddler under 59 months-old.

METHOD

This research used the Library Search research method. The research method of literature study is a method of collecting library data, reading and recording and processing research materials (Zed, 2008) and in this case, the researcher used various media such as Google Scholar, Science Direct, etc. Literature studies can also study various reference books and similar previous research results that are useful for obtaining a theoretical basis for the problem to be studied (Jonathan, 2006).

RESULT AND DISCUSSION

Stunting is one of the nutritional problems of toddlers and describes the growth failure accumulated since before and after birth caused by insufficient nutritional intake. Stunting or short is a failure of linear growth with a deficit in body length according to the age of < 2 Z score based on the world health organization growth standard reference (Sumardiyono, 2020). This opinion is in line with the ministry of health's statement regarding stunting based on the Body Length Index according to Age (BL/A) or Height According to Age (H/A), namely stunted (short) and severely stunted (very short) (Kemenkes RI, 2016).

There are two different interpretations of stunting between the two phases of the child. In the phase of children under 2-3 years old, it indicates a process of failed growth and it can be said that the stunting process is occurring. While in children who are more than 3 years old, it can be indicated that the child has growth failure or has become stunted (short) (Fikawati, 2017).

Stunting needs special attention because it does not only impact the physical growth of children since it also affects the growth and development of the child's brain (de Onis & Branca, 2016; Leroy & Frongillo, 2019). It also decreases the potential of children's cognitive abilities and intelligence (Walker et al., 2015). In addition, children who are suffering from stunting are more vulnerable to infection and in adulthood have a higher risk of developing degenerative diseases (WHO, 2014). This is in line with an opinion of Anisa (2012) that stunted toddlers have a risk of a decrease in intellectual ability, productivity and an increased risk of degenerative diseases in the future. Stunted children tend to be more susceptible to infectious diseases so that they are at risk.
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of experiencing a decrease in the quality of learning in school and are at risk of being absent more often (Jukes et al., 2007). It also increases the risk of obesity (Sawaya & Roberts, 2003).

The increase in a baby weighing only a few kilograms can make the person's Body Mass Index (BMI) rise beyond the normal limit (Anisa, 2012). Attention to the prevention of stunting conditions in children can be done by examining what are the causative factors and creating solutions. Factors that cause stunting are BBLR or low birth weight babies, suboptimal exclusive breastfeeding in infants, nutritional intake that is not in accordance with the child's age, child health status or infectious diseases, incomplete immunization, and genetic factors (García Cruz et al., 2017).

Based on the explanation above, several factors affect the occurrence of stunting. However, in this study, the author focuses on discussing two main factors that are included in two phases, namely during pregnancy and post-delivery of children up to 59 months old, namely BBLR (Bayi Berat Lahir Rendah) or low birth weight babies and suboptimal exclusive breastfeeding in babies since preventing stunting earlier is better than handling it growing up.

Low Birth Weight Babies (BBLR)

One of the factors causing low birth weight (BBLR) is gestational age, parity, twin pregnancy, and pregnancy complications (Rusmitawati et al., 2021) and there is a significant relationship between gestational age, parity, twin pregnancy, and pregnancy complications that cause births with low birth weight babies (BBLR) (Merzalia, 2012). There are many risky factors that cause problems in the body system of children who experience BBLR, due to unstable body conditions, so the risk of death in babies who experience BBLR is 8 times greater than in normal babies. This is because babies with BBLR are at great risk of hypothermia due to lack of fat in the body caused by body systems that play a role in regulating temperature adaptation in rudimentary babies, breathing problems, can also inhibit cognitive growth and development. In addition, it increases the risk of developing chronic diseases in the future (Proverawati & Ismawati, 2010).

Birth weight is the weight of the baby weighed at the first 1 (one) hour after birth. Measurements are carried out at health facilities (Hospitals, Puskesmas, and Polindes), while for cases of babies born at home, weight measurements can be taken within 24 hours at the facilities. Low birth weight babies (BBLR) are babies born with a birth weight of less than 2500 grams without taking into account the gestation period (Damanik, 2010).

As a form of effort to reduce the potential for stunting in the nation's generation, it is necessary to prevent the occurrence of low birth weight babies (BBLR) which is one of the factors causing babies to experience stunting. Efforts to reduce the incidence of BBLR will be more efficient if pregnant women who have a risk of giving birth to a baby with BBLR can be detected as early as possible. Monitoring pregnant women is one of the efforts to detect risk factors for BBLR. This monitoring is an act of following the development of the mother and fetus to improve optimum health and end with the birth of a healthy baby (Wiknjosastro, 2010). In realizing these efforts, couples need to have insights related to good planning in terms of preparations that must be made in undergoing the pregnancy process so that later they can give birth to a baby with normal
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weight. According to Handayani (R. Handayani, 2017) there are 5 aspects that must be done when planning to undergo pregnancy:

1) Prospective pregnant women are encouraged to do pre-inspirational consultation or counseling. It needs to be done to prepare the future mother in undergoing pregnancy by understanding all the risks that will be faced both physically and psychologically;

2) Mothers-to-be are recommended to undergo TT immunization or premarital immunization to prevent tetanus disease;

3) During pregnancy, mothers are recommended to regularly conduct pregnancy checkups. This is done with the aim of knowing the state of development of the health of the mother and fetus. Especially monitoring the development of the fetus in the womb such as examining the size of the uterus, the position of the fetus in the womb and checking the fetal heart rate;

4) Pregnant women are recommended to increase food intake so that nutritional intake for the mother and fetus can be fulfilled properly and healthily;

5) In an effort to prepare for a healthy pregnancy, mothers-to-be are recommended to avoid consuming alcohol and cigarettes, because alcohol can interfere with the growth and development of the fetus while cigarettes will cause premature birth or abnormalities in the location of the placenta in the fetus. In addition, cigarettes can also cause the fetal placenta to come off easily, congenital abnormalities in the baby and most dangerously the amniotic rupture (Early) not in time.

More attention to adequate nutritional intake by pregnant women is very important because it has a significant impact on the health of the baby at birth. If the nutritional status of pregnant women is normal at the time before and during the period of pregnancy, it is likely to be able to give birth to a baby with normal and healthy conditions, enough months with normal weight as well. In other words, the quality of the baby being born depends largely on the state of nutrition of the mother before and during pregnancy. Pregnant women who suffer from SEZ and Anemia have a greater risk of pain, especially in the III trimester of pregnancy compared to normal pregnant women. As a result, they have a greater risk of giving birth to babies with BBLR, death during childbirth, bleeding, postpartum which is difficult because they are weak and easily experiencing health problems (Setyowati, 1996).

Suboptimal Exclusive Breastfeeding in Infants

According to the Indonesian Pediatric Association (IDAI), exclusive breastfeeding is good for the first 6 months to achieve good and optimal growth and development in babies despite some research such as one conducted by Hajebooy et al. (2014) and Lauer et al. (2004) stated that breastfeeding remains suboptimal and cannot prevent mortality during infancy. After the baby reaches the age, the baby can already get adequate complementary foods, as well as breast milk continued until the baby is 24 months old. A good breastfeeding mother is continuous breastfeeding for two years so that it contributes significantly to the intake of essential nutrients in the baby (Fikawati, 2017).
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Based on the results of research conducted by Handayani (2019) that the relationship between exclusive breastfeeding status and the incidence of stunting shows that children with a history of exclusive breastfeeding will be reluctant not to experience stunting, namely (53.2%). In contrast, children with a history of non-exclusive breastfeeding are stunted (36.45). The results of this study are in accordance with the theory that states that the influence of exclusive breastfeeding on changes in short nutritional status is due to the function of breast milk as an anti-infective because it contains immunoglobulins. Babies who get breast milk exclusively for 6 months can improve the intelligence, immunity and development of the child, besides that it can prevent infections and reduce the risk of nutritional problems. Breast milk is the best food for babies because it contains all the nutrients in the ideal ratio and contains immune power.

The results of the study above are in line with the research of Putri and Tanti (2020) which states that the effect of exclusive breastfeeding with the incidence of stunting in stunting toddlers is more common in respondents who do not get exclusive breastfeeding 67.2% compared to respondents who get exclusive breastfeeding 32.8%. Stunting causes adverse impacts on children both in the short term in the form of impaired brain development, intelligence, impaired physical growth and metabolic disorders in the body, as well as in the long term in the form of decreased cognitive abilities and learning achievements, decreased immunity so that it is easy to get sick and a high risk of diabetes, obesity, cardiovascular disease, cancer, stroke and disability at an age so that uncompetitive work quality results in low economic productivity. Therefore, stunting is closely related to a person's nutritional status, the better the nutrition obtained by children from an early age, the lower the risk of stunting.

Based on the results of the research above, it can be understood that the role of exclusive breastfeeding greatly affects the fulfillment of nutritional intake in children. In addition, the content of immunoglobulin plays an important role in keeping the baby from getting infected because the infection that occurs in the baby if not overcome will increase the risk of stunting in children. Meeting children's nutritional needs will help brain growth and development and avoid physical growth disorders. In other words, the fulfillment of child nutrition will automatically reduce the risk of children getting stunted.

CONCLUSION

There are several factors that cause stunting in children starting from the pregnancy phase to postpartum. The main factor that becomes the center of attention in this study was Low Birth Weight Babies (BBLR) because this is directly related to understanding and readiness in pre-pregnancy planning. It is necessary to have a good understanding of what should be done during the future mother's pregnancy, especially in fulfilling nutrition for the pregnant mother and the fetus she is carrying.

Fulfilling nutrition while in the womb and routinely checking fetal development will reduce the risk of children being born with low body weight because low weight conditions cause children to get diseases and infections which are the cause of the risk of stunting if not handled properly. In addition to the fulfillment of nutrition during pregnancy. The fulfillment of postpartum nutrition
also needs to be a concern because the fulfillment of nutrition for breastfeeding mothers will have a good impact on the milk produced for the baby. Optimal exclusive breastfeeding will maintain the baby's nutritional intake fulfilled and get immunoglobulin which plays a role in maintaining children's immunity so that they are not easily exposed to infections to reduce the risk of children getting stunted.

REFERENCE


