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The Influence Factors of Toddler Under the Red Line Age 12-59 Months in Cempaka Subdistrict Banjarbaru City South Kalimantan Year 2018

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ABSTRACT

The study were to analyze the effect of comorbidities, parenting patterns, parents' knowledge and family income on the occurrence of toddler down the red line at 12-59 months in Cempaka sub-district, Banjarbaru. This research use analytic observational with cross sectional study design. The population in this study were all mothers with children aged 12-59 months in Cempaka Sub-district Banjarbaru City with the number of samples 89 toddler. The correlation test results showed a significant influence between comorbidities, parenting, parental knowledge and family income on the occurrence of toddler under the red line age 12-59 months with of p value <0.05. The result of logistic regression test shows that there is significant influence between comorbent disease on the occurrence of toddler down the red line shown by p = 0,004 (p: <0,05), parenting pattern with p = 0,005 (p: <0,05) old with p = 0,003 (p: <0,05), family income to the occurrence of toddler down the red line is indicated by p value = 0,007 (p: <0,05). The most influential factor on the risk of occurrence of toddler down the red line (p = 0.998).

Keywords: Comorbidities, parenting, knowledge, income, toddler.

INTRODUCTION

Toddlers fall into the high-risk age group against the disease. Shortage and excess intake of nutrients in infants can affect nutritional status and health status. The magnitude of this prevalence indicates that nutritional problems, especially the problem of malnutrition is included in the category of severe problems, so that the potential to increase to malnutrition affecting the growth of infants.¹ According to the profile data of Banjarbaru Health Office 2016, and data of Kalimantan Selatan Provincial Health Office 2016, obtained based on the Nutrition Status Assessment, the number of toddler with the weight under the red line (bawah garis merah/BGM) incidents from 13 District was 107 (2.6%) and underweight was 348 (8.4%). In the 13 highest districts, the highest number of toddler was Banjarbaru City with

the number of children aged 12-59 months as many as 17.584 toddler, 140 (0.96%) were BGM.

Banjarbaru has 8 public health center (PHC) namely Banjarbaru PHC from 2,093 target of toddlers, there are 14 (0.6%) is BGM. Cempaka PHC with toddler as many as 2528, there are 58 BGM (2.29%). Landasan Ulin PHC with toddler as many as 1,998 people, with the number of BGM as many as 8 people (0.4%), Guntung Payung PHC the total number of all toddler (4,590), with the number of BGM as many as 11 people (0.23%). Banjarbaru Utara PHC with target of 2,269 toddler, 25 (2,59%) were BGM. Liang Anggang PHC, target of 962 toddler and 5 (0.22%) of BGM. Sungai Ulin PHC, the total number of toddler with BGM is 7 (0,53%) toddler.²

Cempaka Sub-District is the only district that has the activity of traditional diamond mining in Banjarbaru City. Mining areas have problems related to social status, economic impact on the nutrition status of toddler because the majority of family heads of 98% who work as diamond miners with an average family income <Rp. 1.126.000, - / month, and the average mother of BGM,

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96% are housewives or mothers who do not work. From low family incomes affecting household purchasing power for food provision for all family members also affects household economic status. Maternal knowledge about BGM as many as 59%, with the last education mother is elementary school graduates. The role of mother in delivering toddlers BGM to Posyandu (Integrated Service for Health in The Village) as much as 98%. The history of diseases and accompanying illness in BGM as many as 13%.³

The increasing trend of BGM cases in Cempaka PHC occurs significantly each year with an average annual increase of 0.14%, ie 2013 (1.86%), 2014 (2.08%), 2015 (2.27%) and by 2016 (2.29%), it is estimated that by 2017 it will increase to (2.31%) BGM cases. To anticipate the increasing number of BGM, Cempaka PHC made a special BGM prevention program in Cempaka Posyandu to be more focused and monitored in the handling of BGM but not yet analyzed related risk factors that affect the occurrence of BGM.

MATERIALS AND METHODS

This research includes quantitative research, with analytic observational through cross sectional study approach. This research is planned in 4 posyandu. The Posyandu is located in the working area of Cempaka PHC with the target of 1214 children. The study was conducted from May 2017 to January 2018. The population in this study were all mothers with children under 12 to 9 months of age in Cempaka sub-district, Banjarbaru. Inclusion sample criteria (Toddler enrolled in a local service provider, mother of toddler willing her to be used as research sample and willing to be a respondent). Toddlers are not sick, if they are not have a KMS or medical record at the local health center then the health check is performed by health personnel in the region at the time of the research.

RESULTS AND DISCUSSION

The Influence of Comorbidities Against Risk of BGM Age 12-59 Months: Based on the result shows that from 30 people (100%) of respondents there are comorbidities with BGM nutritional risk less than 4 people (100%), compared with the respondent there is no co-existing disease with BGM less than 0%. The result of chi-square test with 95% confidence level, to

see the effect of comorbidity with risk of BGM found that, p -value = 0.004 which means there is a significant influence between the coexistence with the risk of BGM. OR results of 1.44 (95% CI 1.25 - 1.65) which means comorbidities have a risk of 1.44 times greater BGM compared to respondents who do not have comorbidities.

This is because respondents who do not have comorbidities will affect the nutritional status that will have good nutrition because the toddler has never been treated in the hospital, utilizing health services as well as to conduct complete immunization activities and child growth monitoring, no family history of disease, history of exclusive breastfeeding status, utilization of Posyandu while toddlers by having a comorbid will have an effect on nutritional status.

Diarrheal diseases and respiratory diseases such as asthma are among the most prevalent cases in PHC, which is a major cause of under-five growth disorders. There is influence of food consumption, infectious diseases and nutritional status of children under five post-care malnutrition. Infectious diseases or other comorbidities in children will disrupt the metabolism that makes hormonal imbalances and disrupt other body functions. So that infants with recurrent or chronic infections will experience nutritional and immune deficiencies.^{4,5}

The Influence of Parenting Against Risk of BGM Age 12-59 Months: Based on the result that respondents with good parenting with BGM nutrition less than 30 people (37.8%) of respondents, compared with respondents with poor parenting pattern with good nutrition as many as 2 people (14.8%). There is a significant influence between the pattern of care with the risk of BGM. OR results of 1.44 (95% CI 1.25 - 1.65), which means bad parenting has a risk of 1.44 times greater BGM compared to respondents who do not have good parenting. This is because a good parenting will reduce the risk of BGM toddlers because mothers do good feeding and drinking, resting and playing a good time and planting early PHBS in infants.

The role of parents in providing parenting, care and compassion for toddlers is very important that gives attention and the need for children's rights or toddlers in everyday life, giving love, healthy food and drink needs, the fulfillment of the need to rest and play, forming and teaches good behavior and healthy behaviors early on, develops interests and skills according to age, and psychological needs of infants.⁶

Several factors that indirectly encourage the occurrence of nutritional disorders, especially in children under five one of them is the pattern of care. Foster care is a household practice that is manifested by the availability of food and health care as well as other sources for the survival of child growth and development. The good eating habits start from home, for the guidance of parents, both mother, father, and other family members, such as brother, brother, grandmother or caregiver. Maternal care to children demonstrates a mother's ability to provide the stimulation needed by toddlers. The role of mothers usually has the greatest effect on the formation of children's eating habits in the home, because the mothers who prepare the food, ranging from organizing menus, shopping, cooking, preparing food, distributing food and teaching the rules of eating against their children. This means that the mother plays an important role in determining the health status of children. Toddlers who get better quality care will likely have lower morbidity and better nutritional status.⁷

Factors related to the nutritional status of toddler in the work area of Margoroto PHC, Metro Kibang, East Lampung Regency, such as parenting factors of the parents to toddlers. Through the role of parents in terms of good parenting on toddlers through daily life is expected toddlers get the right to the right to grow, the right to have basic education everyday about the health of individuals who must be introduced and applied early on to form a personality and positive behavior on child. From the results of the analysis in this study can be concluded there is influence between parenting parenting with the risk of toddlers BGM. While the effect that occurs is a positive influence, that the better parent care pattern to toddlers then the risk of BGM can be lowered.⁸

The Influence of Knowledge Against Risk of BGM Age 12-59 Months: Based on the result that from 85 people (100%) respondents with high knowledge with BGM nutrition less than 36 people (42.2%), compared with low knowledge respondent with BGM risk less than 4 (100%). The value of p-value = 0.003 which means there is a significant influence between knowledge with the risk of BGM. OR results of 2.36 (95% CI 1.84 to 3.02), which means that respondents with low knowledge have a 2.36 times greater risk of BGM compared to high knowledge respondents.

This is because with the high knowledge of the respondents understand about BGM, understanding the tool to monitor the growth of toddlers, understanding

the characteristics of healthy toddlers, understanding the tool to monitor the nutritional status, to understand how many times to posyandu, to understand clinical symptoms, malnutrition effects, understanding BGM prevention efforts, understand about the factors causing BGM, understand the impact of BB down, and supervision efforts to grow.

Knowledge about toddler growth, care and improvement of health of children under five is very important for continuity of growth of toddler in the future.⁹ According to WHO the factors that influence the incidence of BGM in toddlers one of them is the knowledge of parents. The better the knowledge of parents then the risk of BGM may decrease. Education is a role model to do that can be used to obtain information. Generally the higher a person's education then it is easy to get information that ultimately affects a person's behavior. Maternal education is related to knowledge about health and nutrition practices of children under five such as health care, food, hygiene and sanitation, and awareness of the health of their children so that toddlers are in a state of good nutrition status.

Mothers with good nutritional knowledge will know how to cultivate a good meal. Maternal education influences the nutritional status of children. The higher the education of mothers tend to have children with good nutrition and vice versa. he last level of maternal education is one of the factors that affect the pattern of care including nutritional status, therefore educating women will be a useful step in reducing malnutrition prevalence. Parental education is the most important factor that will affect the care of children, because with a high education in parents will understand the importance of the role of parents in the growth of children. The high level of mother's knowledge is very influential on health care during pregnancy and after childbirth and greatly affect the health and nutrition of his children and their families.¹⁰

The Influence of Income Against Risk of BGM Age 12-59 Months: Based on the result that of 85 people (100%) of respondents with high income with BGM nutrition less than 26 people (30.62%), compared with low income respondents with BGM less than 2 (50%). The p-value = 0.007 which means there is a significant influence between income with risk BGM. OR results of 4.41 (95% CI 0.59 - 3.30) which means that low income has a 4.41 times greater risk BGM compared to respondents who are high incomes. This is because

with high income it can affect the purchasing power and polankonsumsi family such as buying basic foods, vegetables and fruits, toddlers needs for vegetables, side dishes, fruit and milk, and snack.

Family income will be relatively greater if husband and wife work outside the home.¹¹ The characteristics of low-nutrient child households is low food expenditure. The low level of family income of these malnourished children, can lead to limited consumption of infant children. Families with less food consumption can cause nutritional deficiency especially in pregnant and lactating women, babies and toddlers.

Multivariate Analysis: Based on the results, the variables of comorbidities is a variable that has a strong effect on the risk of BGM ($p = 0.998$). The Expected Beta (Exp. B) value of 71.002 where respondents with 71002 comorbent illness would have a risk of BGM compared with respondents who did not have comorbidities compared to other factors such as knowledge, parenting, and income.

CONCLUSION

There is an influence between comorbidities, parenting, parental knowledge and family income on the occurrence of age group toddler down the red line 12-59 months.

Ethical Clearance: This study approved and received ethical clearance from the Committee of Public Health Research Ethics of Medical Faculty, Lambung Mangkurat University, Indonesia. In this study we followed the guidelines from the Committee of Public Health Research Ethics of Medical Faculty, Lambung Mangkurat University, Indonesia for ethical clearance and informed consent. The informed consent included the research title, purpose, participants' right, confidentiality and signature.

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Conflict of Interest: The authors declare that they have no conflict interests.

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