Book of Stunting Risk Detection and Monitoring Health (DRSMK) and Stunting Prevention Behavior in Children the First 1000 Days of Life.

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ABSTRACT

Riskesdas (2018) stated that the stunting or the short stature in children due to chronic malnutrition was at 30.8%, severe malnutrition and nutritional deficiency were at 17.7%. This figure is still far from the World Health Organization (WHO) target of 20%. This means that stunting for toddlers in Indonesia is still above the tolerance limits imposed by the World Health Organization. The purpose of this study was to determine the effects of the use of the book of Stunting Risk Detection and Health Monitor (DRSMK) by Posyandu cadres on the behaviour of Stunting prevention in pregnant women and parenting patterns on children care in the first 1000 days of life in South Lampung Regency. The research output was a cadre manual book in the effort to prevent stunting from pregnancy to the age of 1000 days of life. This research used quantitative research, quasi-experimental analytic research design. The study was conducted in 8 villages in Lampung Selatan Regency, Lampung Province. The number of samples was 120, the treatment group was 60 and the control was 60 respondents. The treatment group was given health education and trained to use the DSRMK Book by the health cadre for 3 months, then measured behaviour and parenting pattern in preventing stunting. In the control group was given counselling according to the puskesmas SOP. The results showed that 1) there was an influence on the use of DRSMK books by Posyandu cadres to prevent maternal stunting through ANC examination. 2) There was an influence on the use of DRSMK books by Posyandu cadres on the prevention of maternal stunting behaviour during pregnancy, 3) there was the influence on the use of DRSMK books by posyandu cadres on parenting patterns in preventing stunting. The DRSMK book is easy to use by health cadres in an effort to prevent and detect stunting from pregnancy to 24 months old.

Keyword: Stunting; Detection book; Prevention; Children; Behavior

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ABSTRAK

Riskesdas (2018) menyatakan proporsi stunting atau balita pendek karena kurang gizi kronik sejumlah 30,8%, gizi buruk dan gizi kurang 17,7%. Angka ini masih jauh dari target Badan Kesehatan Dunia (WHO) yakni 20%. Hal ini memberi arti stunting Balita di Indonesia saat ini masih di atas batas toleransi yang ditetapkan oleh Badan Kesehatan Dunia. Tujuan penelitian untuk mengetahui Pengaruh Penggunaan Buku Deteksi Risiko Stunting dan Monitor Kesehatan (DRSMK) oleh Kader Posyandu terhadap Perilaku pencegahan Stunting pada ibu hamil dan pola asuh pada perawatan anak 1000 hari pertama kehidupan di Kabupaten Lampung Selatan. Luaran penelitian adalah buku panduan kader dalam upaya pencegahan stunting mulai dari masa kehamilan sampai usia 1000 hari kehidupan. Jenis penelitian kuantitatif, rancangan penelitian analitik quasi eksperimen. Penelitian dilakukan di 8 desa di Kabupaten Lampung selatan Provinsi Lampung. Jumlah sampel 120, kelompok

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perkalian 60 dan kontrol 60 responden. Kelompok perlakuan diberikan pendidikan kesehatan dan dilatih menggunakan Buku DRSMK oleh kader kesehatan selama 3 bulan, selanjutnya diukur periode dan pola asuh dalam mencegah terjadinya stunting. Pada kelompok kontrol diberikan penyuluhan sesuai SOP puskesmas. Hasil penelitian menunjukkan 1) ada pengaruh penggunaan buku DRSMK oleh kader Posyandu terhadap perlaku pencegahan stunting ibu melalui pemeriksaan ANC. 2) ada pengaruh penggunaan buku DRSMK oleh kader Posyandu terhadap perilaku pencegahan stunting ibu masa kehamilan, 3) ada pengaruh penggunaan buku DRSMK oleh kader posyandu terhadap pola asuh anak dalam pencegahan stunting. Buku DRSMK madah digunakan oleh kader kesehatan dalam upaya pencegahan dan deteksi stunting mulai kehamilan sampai anak berusia 24 bulan.

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INTRODUCTION

Rusli S (2019) states that the main factor in the height stunting problem in Indonesia was poor nutritional intake since the fetus is still in the womb (during pregnancy), newborn, until two years old children. Malnutrition in the first two years of life can cause irreparable brain damage. Nutrition investment in the first 1,000 days of life is a non-negotiable obligation. Nutrition problems will not only interfere with physical development and threaten children's health, but can also cause poverty. Brain growth on malnourished children will not be optimal so it will affect their intelligence in the future. Job opportunities and earning more income can be smaller in stunting children. Nutritional interventions need to be carried out in the form of continuing education in the community, especially parents. Parents should be aware of the nutritional needs of children, good and bad foods, being unaffected by an instant lifestyle and advertisements for children's food products that sometimes excessive promises. Any mistakes in providing food intake to children can be at risk for the nation's future. As the case in early 2018, in Kendari it was found toddlers suffering from malnutrition due to being given sweetened condensed milk due to ignorance of parents. In addition, at Wamena has recently an outbreak of severe malnutrition that has claimed lives. Food aid interventions are needed, but education for the community must not be forgotten.

The 2017 nutrition monitoring status indicates that Indonesia's stunted toddlers prevalency is still high with 29.6% above the World Health Organization (WHO) set(20%). To beat this number, people need to consider what factors cause stunting. Stunting is a growth failure in children (body and brain growth) due to malnutrition for a long time. Assuming that children are shorter than normal children on their age and have a delay in thinking. Prolonged Malnutrition occurs from the fetus in the womb until the beginning of the child's life (the first 1,000 days of birth). The causes are low access to nutritious food, low intake of vitamins and minerals, and poor diversity of food and animal protein sources.

Maternal factors and poor parenting, especially in the behavior and practice of feeding children, are also the cause of child stunting when the mother does not provide adequate and good nutrition. Mothers whose adolescents lack nutrition, even during pregnancy, and lactation will greatly affect the growth of the child's body and brain. Other factors that cause stunting are infection in the mother, teenage pregnancy, mental disorders in the mother, stunted child birth spacing, and hypertension. In addition, the low access to health services including access to sanitation and clean water is one of the factors that greatly influence the growth of children. To prevent this, multiply to eat nutritious foods derived from local fruits and vegetables in the womb. Then the nutritional adequacy of a teenage girl is also needed so that when she is pregnant as an adult there is no malnutrition. Besides, it also requires attention to the environment to create access to sanitation and clean water.

Majid YN (2018) states that Stunting is a chronic nutritional problem caused by a lack of nutritional intake for a long time, generally because of food intake that does not match nutritional needs. Stunting starts in the womb and is not seen when a child is two years old. In addition, stunted growth, stunting is also associated with suboptimal brain development, which causes poor mental and learning abilities, and poor school performance. Stunting and other conditions related to malnutrition, are also considered as a risk factor for diabetes, hypertension, obesity and death from infection.

The causes of Stunting according to the Adoption Nutrition Site, stunting develops in the long term due to the combination of some or all of the following factors: 1. Chronic malnutrition for a long time 2. Retardation of intrauterine growth 3. Not enough protein in total proportion to calorie intake 4. Hormonal changes which is triggered by stress 5. Often suffers from an infection early in a child’s life. The development of stunting is a slow, cumulative process and does not mean that current food intake is inadequate. Growth failure may have occurred in a mother’s past. Stunting Symptoms 1. Children are shorter in stature for their age 2. Body proportions tend to be normal but children appear younger / smaller for their age 3. Low body weight for their age 4. Delayed bone growth. The best time to prevent stunting is during pregnancy and the first two years of life. Stunting in early life will have a negative impact on health, cognitive, and functional as an adult.

Various efforts to overcome this stunting problem include the Ministry of Health with the support of the Millennium Challenge Account-Indonesia (MCA-I), through the Compact
Millennium Challenge Corporation (MCC) Grant Program, conducting a National Nutrition Campaign for Community-Based Health and Nutrition Programs (PKGBM). One of the interventions in the PKGBM program is about changing people’s behavior, which is carried out in the National Nutrition Campaign (KGN).

Riskesdas 2018 and the Province of Lampung explained, young women who will become potential mothers will face the risk of chronic energy shortages (KEK) in 2017 ranked first in Indonesia as much as 44% (Indonesia 32%), WUS risked KEK 12.8% (Indonesia 10.7%), pregnant women at risk of KEK 18.5% (Indonesia 14.8); Babies IMD 60.42% (Indonesia 73%), this condition has a contribution to the occurrence of stunting in children. Lampung Region which became 1000 stunting priority villages in 2018 is South Lampung, Central Lampung and East Lampung.

Stunting cases in South Lampung Regency in 2018 reached 29 percent. Based on the results of the basic research survey, health has decreased. Wherein, previously in 2013 stunting cases reached 43 percent. South Lampung was chosen as a research location due to being one of the stunting priority villages in 2018, this region is a region rich in natural resources and rich in protein sources because most of the coastal areas, industrial areas, is close to the provincial capital, as well as being a trans-Sumatra region, but stunting problems are still found in children. In addition to efforts to alleviate Stunting, prevention and anticipation efforts are also needed.

METHOD

This type of quantitative research with quasi-experimental research designs. Pregnant women who have children aged 0-2 years, carried out an assessment of prevention of stunting and parenting.

RESULTS

The results of monitoring the nutritional status (PSG) in 2015-2017 the trend of stunting coverage in South Lampung Regency experienced an increase in the number of stunting toddlers in 2015 of 23.20%, in 2016 of 24.28% and in 2017 of 30.30%. There are 10 priority stunting villages in South Lampung Regency including Desa Pancasila, Tajimalela, Taman Agung, Banjarmasin, Bangunrejo, Kemukus, Batubalak, Wayendam, Karyamulya Sari and Mekarsari. The prevalence of stunting toddlers in 10 villages that are very controlling, namely in Kemukus Village is 20.77%, Wayendam 18.89%, Taman Agung 17.48%, Batubalak 16, 98%, Karyamulya Sari 15, 23%, Mekarsari 15.10% , Tajimalela 14.48%, Banjarmasin 12.35%, Bangunrejo 10.04% and Pancasila 7.28%. Stunting in South Lampung Regency in 2013 reached 43% and in 2018 decreased to 29% (Riskesdas, 2018). The results of the interview with the head of the Puskesmas during the stunting study can be seen in the following table:

Table 1 Data on stunting of children under five on stunting focus villages in South Lampung

| No | Village       | Year 2018 | Year 2019 |
|----|---------------|-----------|-----------|
| 1  | Pancasila     | 27        | 20        |
| 2  | Tajimalela    | 45        | 33        |
| 3  | Taman Agung   | 20        | 10        |
| 4  | Banjarmasin   | 20        | 19        |
| 5  | Bangun Rejo   | 35        | 25        |
| 6  | Kemukus       | 25        | 22        |
| 7  | Batu Balak    | 15        | 5         |
| 8  | Way Gelam     | 51        | 25        |
| 9  | Karya Mulya Sari | 63      | 43        |
| 10 | Mekar Sari    | 54        | 34        |

Table 2 Characteristics of respondents having children 0-24 months and respondents being pregnant

| No | Characteristics of respondents | Mean | Median | SD  | Min-max | n  |
|----|--------------------------------|------|--------|-----|---------|----|
| 1  | Age of mother with child aged 0-24 month | 26.37 | 27     | 6,067 | 17-43   | 60 |
| 2  | Age of child (month)               | 12  | 10     | 6,501 | 3-24    | 60 |
| 3  | Maternal age                       | 28  | 28,5   | 5,672 | 18-42   | 60 |

Hereinafter, the mother was given education by the cadre using the DRSMK book, then there were 12 visits and an assessment of stunting prevention behavior was done at the end of the visit. The time of the study was carried out for six months in villages at risk of stunting. The population in this study was all pregnant women and mothers who have children aged 0-2 years. Stratified sampling technique was obtained from 10 villages that became priority handling stunting.

In table 2, the average age of mothers in the group with children aged 0-24 months was 26 years, the average age of children was 12 months and the average age of mothers who are pregnant was 28 years.
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Table 3 Characteristics of respondents based on education, and occupation.

| No | Karakteristik responden | Total | X | n |
|----|------------------------|-------|---|---|
| 1  | Education              |       |   |   |
|    | College                | 2     | 2 | 120|
|    | Senior High School     | 33    | 27,5 | |
|    | Junior high school     | 52    | 43 | |
|    | Primary school         | 33    | 27,5 | |
| 2  | Occupation             |       |   |   |
|    | Housewife              | 100   | 83 | |
|    | Work outside the home  | 20    | 17 | |

Based on table 3, it was found that most mothers in junior high school were 52 mothers (43%), most of the mothers’ jobs was housewives with total 100 mothers (83%).

On the average table 4 score in the control group of respondents who have children aged 0-24 months in a row ANC behavior was56.63, stunting prevention behavior was31.67 and childcare patterns was34.83. In the ANC behavior intervention group the average score was 74.5; stunting prevention behavior 43.27 and parenting 62.80.

The average score in the intervention group of respondents who were pregnant successively ANC behavior was 57.17, stunting prevention behavior was 32 and parenting was 47.17. In the ANC behavior intervention group the average score was 62.37; stunting prevention behavior 38.1 and parenting 42.6.

Table 4: Frequency distribution of antenatal care (ANC) behavior, stunting prevention and parenting

| Respondents who have children 0-24 months |  |
|-------------------------------------------|--|
| Frequency distribution                     |
| **ANC behavior**                          |
| Control                                   |
| Mean                                      | 56.6 |
| Median                                    | 61.5 |
| SD                                        | 11.67 |
| SE                                        | 2.13 |
| Min-max                                   | 30-68 |
| n                                         | 30 |
| p-value                                   | 0.000 |
| Intervention                              |
| Mean                                      | 74.5 |
| Median                                    | 71   |
| SD                                        | 7.99 |
| SE                                        | 1.46 |
| Min-max                                   | 51-85 |
| n                                         | 30 |
| p-value                                   | 0.000 |
| **Perilaku pencegahan stunting**          |
| Control                                   |
| Mean                                      | 31.67 |
| Median                                    | 32   |
| SD                                        | 5.567 |
| SE                                        | 1.02 |
| Min-max                                   | 18-45 |
| n                                         | 30 |
| p-value                                   | 0.000 |
| Intervention                              |
| Mean                                      | 43.27 |
| Median                                    | 43   |
| SD                                        | 4.059 |
| SE                                        | 0.74 |
| Min-max                                   | 35-50 |
| n                                         | 30 |
| p-value                                   | 0.000 |
| **Parenting style**                       |
| Control                                   |
| Mean                                      | 34.83 |
| Median                                    | 32   |
| SD                                        | 6.742 |
| SE                                        | 1.23 |
| Min-max                                   | 27-57 |
| n                                         | 30 |
| p-value                                   | 0.000 |
| Intervention                              |
| Mean                                      | 62.8 |
| Median                                    | 62   |
| SD                                        | 5.726 |
| SE                                        | 1.05 |
| Min-max                                   | 52-72 |
| n                                         | 30 |

On table 4 the average score in the control group of respondents who have children aged 0-24 ANC behavior was 56.63 with SD 11.67 and in the intervention group of respondents who were pregnant respectively ANC behavior was 57.17 with SD 7.9 The statistical test results obtained p value = 0.000, it can be concluded that there was the influence of the use of the DRSMK book by Posyandu cadres on the prevention of maternal stunting through ANC examination.

The average score in the control group of respondents who had children aged 0-24 for prevention behavior during pregnancy was31.67 with an SD of 5.57 and the average score of the intervention group was 43.27 with an SD of 4.06. The statistical test results obtained p value = 0.000, it can be concluded that there was the influence of the use of the DRSMK book by Posyandu cadres to prevent maternal stunting behavior during pregnancy.

The average score in the control group of respondents who have children aged 0-24 for an average parenting score was 34.83 with an SD of 6.74 and the average score in the intervention group was 62.80 with an SD of 5.73. The statistical test results obtained p value = 0.000, it can be concluded that there was the influence of the use of the DRSMK book by posyandu cadres on parenting in preventing stunting.

The average score in the control group of respondents who were pregnant ANC behavior with an average score of 57.17 with SD 10.04 and in the intervention group of respondents who were pregnant respectively ANC behavior of 62.37 with SD 5.78. The statistical test results obtained p value = 0.018, it can be concluded that there was an influence of the use of the DRSMK book by Posyandu cadres on the prevention of maternal stunting through ANC examination.

The average score in the control group of respondents who were pregnant for prevention behavior during pregnancy averaged a score of 32 with an SD of 4.83 and in the intervention group an average score of 38.17 with an SD of 6.578. The statistical test results obtained p value = 0.000, it can be concluded that there was the influence of the use of the DRSMK book by Posyandu cadres to prevent maternal stunting behavior during pregnancy.

The average score in the control group of respondents who were pregnant, the average score for parenting children aged 0-24 months in a row the average score was 32 and childcare patterns was 34.83. In the ANC behavior intervention group the average score was 74.5; stunting prevention behavior 43.27 and parenting 62.80.
The results showed an average distinction of scores in the control group and the intervention group, both the group of mothers who had children aged 0-24 and who were pregnant. The statistical test results also concluded that there was an influence on the use of the DRSMK book by Posyandu cadres on the prevention of maternal stunting through ANC examination at p = 0.000 (mothers who have children 0-24 months) and p = 0.18 in pregnant women. The results of the study were in accordance with Nurfaridah (2017) research on behavior which states that health behavior can be classified into 3 groups: 1) health maintenance behavior, one's efforts to maintain or maintain health so as not to get sick and efforts to cure when sick, including 3 aspects: a) Behavior of disease prevention, b) Behavior of health improvement, c) Behavior of nutrition (food and drink), 2) Behavior of seeking and using health service systems or facilities 3) Behavior of environmental health.

The results of statistical tests in this study on the group of children who have children 0-24 months and on the group of women who are pregnant, in the control group and the intervention group shows that there is a waste of influence of the use of the DRSMK book by Posyandu cadres to prevent maternal stunting behavior during pregnancy. This can be explained by the statement of Sarafino (2006), namely the factors that influence health behavior which is a person's response to stimulus or objects related to health, illness and factors that affect healthy illness (health) such as the environment, food, drinks, and health services. Likewise in the health behavior book Notoatmodjo (2007) about factors that influence health behavior, including 3 (three) main factors, namely: 1) Predisposing factors is a factor that facilitates or predisposes the occurrence of a person's behavior, including knowledge, attitudes, beliefs, values, traditions, and so on. 2) Enabling factors are factors that enable or facilitate behavior or actions, such as facilities and infrastructure or facilities for the occurrence of health behaviors, for example: Puskesmas, Posyandu, Hospitals, water disposal sites, landfills, sports venues, nutritious food, money and so on. 3) Strengthening factors (reinforcing factors) which are factors that encourage or strengthen the occurrence of behavior. Sometimes even though people know and are able to behave healthy, but don't do it. Based on Green's theory of knowledge factors affecting health behavior, the provision of the DRSMK book is to increase knowledge, guide mothers to be able to behave healthy lives both during pregnancy and after the baby is born.

In addition, Taylor (2003) also explains the factors that influence behavior are 1) demographic factors, individuals who are young, more prosperous, have a better level of education and are in a low stress condition with high social support have better healthy behaviors than people who have fewer resources. 2) Age, typically health behavior in children can be said to be good, worsens in adolescents and adults, but increases again in older people. 3) Values, for example training for women is very desirable for certain cultures but not for other cultures. 4) Personal Control, the perception that an individual's health under personal control also determines a person's healthy behavior. 5) Social influence, family, friends, and work environment can influence healthy behavior. 6) Personal Goal, the habits of healthy behavior will make a healthy person. 7) Perceived Symptoms, healthy habits of eating balanced nutritious foods will affect the health of pregnant women and their children. 8) Access to the Health care delivery system, access to health care also influences health behavior. 9) Cognitive factors, health behavior has a relationship with cognitive factors, such as the belief that certain behaviors can affect health.

Related to health behavior can be classified into 3 groups: 1) health care behavior (health maintenance), one's efforts to maintain or maintain health so as not to get sick and efforts to cure when sick. Behavior of health care consists of 3 aspects: a) Behavior of disease prevention, b) Behavior of illness when sick, and c) Behavior of health improvement if someone is ill. 2) Behavioral search and use of systems or health service facilities. Person's efforts at the time of suffering and or accident. Start from self-medication to seeking treatment abroad. 3) Environmental health behavior.

The results of this study also explain that parenting influences parental behavior in preventing stunting, Rahmad et al. (2016), shows the incidence of stunting in infants caused by low family income (p = 0.026; OR = 3.1), non-exclusive breastfeeding (p = 0.002; OR = 3.2), poor MP (p = 0.007; OR = 3.4) and incomplete immunization (p = 0.040; OR = 3.5). The results of the analysis prove that breastfeeding is not very dominant causing stunting in infants in Banda Aceh with OR = 4.9. This study also produced the same conclusions with the research of Rahmawati et al. (2013), which showed that there was a relationship between father's education (p = <0.001) OR = 3.37, parental income and nutritional status (p = 0.001) OR = 6.01, parenting with nutritional status (p = 0.001) OR = 8.07, eating patterns with nutritional status (p = 0.001) OR = 6.01. The results of this study are also the same as Melasari's research (2019) in Paud Al Fitrah Sei Rampah Subdistrict, Serdang Begadai District, which shows that the majority of parenting patterns are good (56.25%) and the nutritional status of toddlers is majority not stunting, and there is a relationship between parenting parents with the incidence of stunting in infants with a test result of p = 0.000.

The results of this study also strengthen with the research of Rahmawati et al. (2017), also explaining the influence of Nutrition Counseling with Media Booklets on Increasing Knowledge, Attitudes, and Actions of Mothers in Preventing Malnutrition in Toddlers in the Work Area of Puuwatu Health Center, Kendari City. Mc Nemar test results showed that there were significant differences in knowledge of p value (0.001) < (0.05), attitude p value (0.013) < (0.05) and actions p value (0.013) < (0.05). This is evidenced by the differences in knowledge, attitudes, and actions of respondents before and after being given health education through nutrition counseling for 21 days by using media booklets to increase knowledge, attitudes, and actions in preventing malnutrition in toddlers.

Rahmad and Miko, 2016, conducted a study on children under five years of age based on parenting and family income in Banda Aceh. Stunting prevalence in Aceh province at the national level, stunting prevalence was 44.6%, Banda Aceh prevalence was 38.8%. A sample of 96, showing the incidence of stunting in infants caused by low family income (p = 0.026; OR = 3.1), non-exclusive breastfeeding (p = 0.002; OR = 4.2), poor MP-ASI (p = 0.007; OR = 3.4), and incomplete immunization (p = 0.040; OR = 3.5). Multivariate analysis showed that not giving ASI was very dominant causing stunting in children less than five age years in Banda Aceh.
Acen with OR = 4.9. In conclusion, stunting in infants is associated with lower family income, not giving exclusive breastfeeding, giving poor MP-ASI and incomplete immunization. Not giving exclusive breastfeeding is a dominant factor as a risk of stunting. According to Arifidyah, Rohmahwati, Ririany (2015), factors are influencing the incidence of stunting in children under five in rural and urban areas, indicate that the factors affecting stunting in children under five in urban areas are mother’s education, family income, knowledge mothers regarding nutrition, exclusive breastfeeding, age of MP-ASI, adequacy level of zinc and iron, history of infectious diseases and genetic factors. Mother’s employment status, number of family members, immunization status, energy sufficiency level, and LBW status do not influence stunting. The level of protein and calcium adequacy in rural areas shows a significant relationship while in urban areas does not show a relationship. The factor that most influences the occurrence of stunting in children under five in rural and urban areas is the level of zinc adequacy. e-Journal of Health Library, vol. 3 (no. 1) January 2015

The results of research on parenting in this study showed the same results with research Yudianti and Saeni, 2016, explaining the results of parenting with the incidence of stunting in toddlers in Polewali Mandar district. The results of the analysis of personal hygiene practices obtained as many as 16 (31.4%) of mothers showed poor practice in the case group and 45 (88%) were obtained in the control group. There is a relationship between the practice of personal hygiene with the incidence of stunting which is indicated by the value of p = 0.016 and OR = 3.42 which means that poor personal hygiene practices have a risk of 3.42 times higher to experience stunting compared with good personal hygiene practices. Manaranj health journal, volume 2, number 1. July 2016

Renyoet and Rochimiwati (2018), explained that there is a significant relationship between mother’s attention/support for children in feeding practices, psychosocial stimulation, cleanliness/hygiene and environmental sanitation and utilization of health services with the incidence of stunting in children between the ages of 6-23 months with a value of p=0.001, p=0.000, p=0.000 and p=0.006. Mothers have a major contribution in the process of child growth where parenting shows a significant relationship with the incidence of stunting in children 6-23 months. Widyaningsih, Kusnandar, Anantanyu (2018), stated that there was a relationship between birth length, feeding patterns and food diversity with stunting (p 0.05). Indonesian Journal of Nutrition (The Indonesian Journal of Nutrition) Vol. 7, No. 1, December 2018 (22-29). Rahmayana, Ibrahim, Damayati, 2014 stated that there was a significant relationship between feeding practices (P=0.007), psychosocial stimulation (P=0.000), hygiene/hygiene practices (P=0.000), environmental sanitation (P=0.000) and service utilization. health (P = 0.016) with stunting in children aged 24-59 months at Posyandu Asoka II in the coastal area of Barombong sub-district. Al-Sihah: Public Health Science Journal Vol. VI, No. 2, July-December 2014

Rahmayani (2015) stated that the risk factors for stunting were economic status (p = 0.03; OR = 4.5), eating patterns (p = 0.001; OR = 6.67), health care patterns (p = 0.03; OR = 3.25), and psychosocial parenting (p = 0.01; OR = 4.33). While the variables of mother’s education level and mother’s employment statuses were not proven to increase risk factors. The most dominant factor is the eating pattern (p = 0.01; OR = 6.20). It is proven that eating patterns, health care patterns, psychosocial parenting patterns and economic

status are risk factors that influence the incidence of stunting in children aged 12-36 months in the Sumpur Kudus Community Health Center, Sijunjung Regency.

Limitation of The Study

This study has limitations in that this study only looks at the respondents’ factors due to limited time, energy, and cost.

CONCLUSIONS

1. The average score in the control group of respondents who have children aged 0-24 for ANC behavior was 56.63 with SD 11.67 and in the intervention group respondents who are pregnant, ANC behavior was 57.17 with SD 7.9. The results of statistical tests obtained p value = 0.000, it can be concluded that there was the effect of using the DRSMK book by Posyandu cadres on maternal stunting prevention behavior through ANC examination.

2. The average score in the control group of respondents who have children aged 0-24 for preventive behavior during pregnancy was 31.67 with an SD of 5.57 and in the intervention group, the average score was 43.27 with an SD of 4.06. The results of statistical tests obtained p value = 0.000, it can be concluded that there was the effect of using the DRSMK book by Posyandu cadres on stunting prevention behavior during pregnancy.

3. The average score in the control group of respondents who have children aged 0-24 for parenting has the average score of 34.83 with an SD of 6.74 and in the intervention group, the average score of 62.80 with an SD of 5.73. The results of statistical tests obtained p value = 0.000, it can be concluded that there was the effect of using the DRSMK book by posyandu cadres on child care patterns in preventing stunting.

4. The average score in the control group of respondents who are pregnant with ANC behavior has the average score of 57.17 with an SD of 10.04 and in the intervention group; respondents who are pregnant are 62.37 with an SD of 5.78, respectively. The results of statistical tests obtained p value = 0.018, it can be concluded that there was the effect of using the DRSMK book by Posyandu cadres on maternal stunting prevention behavior through ANC examination.

5. The average score in the control group of respondents who are pregnant for preventive behavior during pregnancy has an average score of 32 with an SD of 4.83 and in the intervention group, an average score of 38.17 with an SD of 6.578. The results of statistical tests obtained p value = 0.000, it can be concluded that there was the effect of using the DRSMK book by Posyandu cadres on stunting prevention behavior during pregnancy.

6. The average score in the control group of respondents who are pregnant, parenting has an average score of 47.17 with an SD of 9.969 and in the intervention group, an average score of 42.6 with an SD of 6.37. The results of statistical tests obtained p value = 0.039, it can be concluded that there was the effect of using the DRSMK book by Posyandu cadres on child care patterns in preventing stunting.
REFERENCES

Astuti. 2012. The Effect of Health Education on Changes in Knowledge and Attitudes of Pregnant Women in Consuming Fe (Ferum) Tablets at the Sri Lumintu Maternity Home, Surakarta. Thesis. Faculty of Health, University of Muhammadiyah Surakarta.

Almatsier S. (2009) Basic Principles of Nutrition. Jakarta: Gramedia Pustaka.

Andriani M, Wirjatmadi B (2014). Nutrition and Health of Toddlers. Jakarta: Kencana

Astuti, Indriyani (2018), https://mediaindonesia.com/read/detail/195157-risest-kesehatan-nasional-2018-angka-stunting-down

F Meliyasari, Isnawati (2014). Risk factors for stunting in children aged 12 months in Purwokerto Village, Patebon District, Kendal Regency. Journal of Nutrition College, Vol.3(2), 16-25.

Hidayah F (2013). Exclusive breastfeeding as a risk factor for stunting in children aged 6-24 months in the city of Yogyakarta. Yogyakarta: Gajah Mada University.

Kompas.com (2018), https://lifestyle.kompas.com/read/2017/02/08/100300123/rekognize.stunting.dan.effect.pada.percepatan.anak.

Majid, YN, (2018) Trillion, http://www.tribunnews.com/kesehatan/2018/08/03/empat-dari-10-anak-indonesia-alami-stunting-menkes-sebut-negara-rugi-to-hundreds-trillion.

Ni’mah K, Nadhiroh SR (2015). Factors related to the incidence of stunting under five. Indonesian Nutrition Media. 2015;Vol. 10, No. January 1 -- June.

RENSTRA. Strategic Plan of the Ministry of Health 2015-2019. Jakarta: MOH; 2015.

Republika, https://databoks.katadata.co.id/datapublish/2018/04/08/di-mana-provinsi-dengan-stunting-tertinggi-2017, accessed 8 April 2018

Rusli S, D; Dodik Briawan, (2019). https://www.republika.co.id/berita/nasional/umum/18/01/24/p30s85396-who-78-juta-balita-di-indonesia-penderita-stunting, accessed on 2 March 2019.

RISKESDAS (2018). National Basic Health Research Results Report 2018. Jakarta: Balitbangkes, Ministry of Health, Republic of Indonesia;

Oktarina Z. (2012) Relationship of Birth Weight and Other Factors with Stunting Incidence in Toddlers Age 24-59 Months in Aceh, North Sumatra, South Sumatra, and Lampung Provinces in 2010. Jakarta: University of Indonesia;

TNP2K. (2017) Priority Districts/Cities for Interventions for Stunting. Jakarta.

UNICEF (2012), Summary of Nutritional Studies. Jakarta: Center for Health Promotion - Ministry of Health of the Republic of Indonesia;

Zilda Oktarina and Trini Sudiarti1 (2017), nutrition and food journal 2017 8(3) 175-180. https://www.researchgate.net/publication/321967779_FAKTOR_RISIKO_STUNTING_PADABALITA_24-59_BULAN_DI_SUMATERA [accessed Jan 06 2019].

Book of Stunting Risk Detection and Monitoring Health (DRSMK) and Stunting Prevention Behavior in Children the First 1000 Days of Life.
