DISCLAIMER<replace with the standard disclaimer, if required>Ibustibeateraturaspelestiadeliquiasitaeetumquissandeninumenecturreped quat. Et enis in commo officatvollabo. Ut volorum sit excestoteevenimaximoluptaenulpaquissitfaceste non ped moloriatemolorenitmototat res eaquidminctaturantlaborporum.

REPORT DRAFT

MASMIRAH PROJECT EVALUATION (BASELINE-ENDLINE STUDY) IN LOMBOK ISLAND/CITIES, WEST NUSA TENGGARA .

LIST OF CONTENTS

ACRONYM

ANC : *Antenatal Care*
Breast milk : Mother's milk
Catin : Prospective Bride
HPK : The First Day of Life
IVR : *Interactive Voice Response*
MASMIRAH : Helping Children Prosperous Through Targeted Interactive Information
MP-ASI : Complementary Food for Mother's Milk
PMT : Provision of Supplementary Food
Posyandu : Integrated Service Post
Puskesmas : Community Health Center
TTD : Blood Supplement Tablets
4 Q's : 4 Too (Too Much, Too Young, Too Often, Too Short)
PMT : Provision of Supplementary Food
MCH : Maternal and Child Health
SDIDTKA : Stimulation, Detection and Early Intervention of Child Development

EXECUTIVE SUMMARY

Stunting in Indonesian children aged 0-23 months is a public health problem caused by direct and indirect factors. Prevention and reduction of stunting is one of the key investments in human and economic development. This study aims to assess the knowledge, attitudes, and practices of parents/caregivers regarding parenting and nutrition to prevent stunting; assess the existing support from midwives and other health workers in the context of implementing stunting prevention programs; as well as identifying existing policies and mechanisms from the government to collaborate on stunting prevention with services MASMIRAH .

This study uses a quantitative and qualitative approach to achieve research objectives. Studies have been conducted in all selected project areas, namely Central Lombok, West Lombok, East Lombok, North Lombok, and Mataram City.

The results of the evaluation showed that there was a tendency to increase knowledge, improve attitudes and behavior of respondents regarding healthy pregnancy, nutrition and child care and prevention of stunting after the implementation of the MASMIRAH project (Helping Prosperous Children Through Guided Interactive Information).

68% of respondents at the baseline and 81.7% of respondents at the endline answered correctly that stunting is a baby with low height for their age. Among the 6 vaccines that must be given to children, the measles and rubella vaccines are the ones parents know best . Most of the respondents, namely 91% at the baseline and 99% at the endline, answered that they knew the key time to wash their hands. About 78% at baseline and 80% at endline, respondents answered that they had at least 6 antenatal visits. Most (95%) on the baseline and (97%) on the endline (Graph 6) answered that the minimum distance for the next pregnancy was more than 18 months.

Improvements in respondents' attitudes about pregnancy, nutrition, and stunting, especially in terms of pregnancy spacing, food for pregnant & lactating women, exclusive breastfeeding, complementary foods and good drinking water. Most of the information obtained from midwives or other health workers was about nutritious food and clean & healthy lifestyle before pregnancy (74%) and nutritious food for children aged 6-24 months (39%). All pregnant women have received blood supplement tablets (TTD) and most (88.6%) have consumed them regularly every day. However, there were still respondents (11.4%) who did not regularly/disorderly take iron tablets.

Midwives and other health workers as well as various other parties have been heavily involved in various stunting prevention programs, namely health checks for pregnant women, various education using various media (fresh food, leaflets, banners, posters, flipcharts, food models, Maternal and Child Health books (KIA), stickers, photos, and dolls) for the nutrition class, pregnant women class & toddler class, special budgeting funds are available from the Health Office, Puskesmas, & Village Funds.

The government and various non-government agencies have been involved in the convergence program to accelerate stunting reduction, chaired by the Office for Population Control, Family Planning (P2KB) in collaboration with the Health Service, the Women's Empowerment and Child Protection Service (P3A), and the Food Security Service under the coordination of the Development Planning Agency. Region (Bappeda).

BACKGROUND

The prevalence of stunting in Indonesian children aged 0-23 months was 32.9% in 2013, 26.1% in 2016, and 29.9% in 2018. In Indonesia, one in three children is stunted (RI Ministry of Health, 2018). The high prevalence of stunting in Indonesia is also accompanied by very large disparities in the prevalence of stunting between

districts/cities (Ayuningtyas et al., 2022). The first thousand (1000) days of life is the most critical period for child development. At this time, adequate nutritional intake, appropriate early stimulation and good parenting patterns are very important to ensure that children can achieve optimal growth and development. Even though it has decreased in the last eight years, the prevalence of stunting in Indonesia is still relatively high compared to other countries in the Southeast Asian Region.

Prevention and reduction of stunting is one of the key investments in human and economic development. Stunting is a nutritional problem in early life which can result in increased morbidity and mortality, decreased physical capacity and cognitive ability, decreased productivity and income, as well as increased risk of disease and risk of living in poverty until adulthood (Grantham-McGregor, et al., 2007 ; Hoddinott, et al, 2013; Prendergast & Humphrey, 2014).

The Helping Children Prosperity Through Guided Interactive Information (MASMIRAH) Project is an innovative project in providing education to groups at risk of stunting. This project builds on a previous pilot conducted at 22 posyandu (Integrated Service Post) in Central Lombok during 2020, which seeks to increase parental/caregiver knowledge about child health and nutrition in the first 1000 days to reduce stunting. The activities in this project were held to answer the needs of parents/caregivers, especially mothers, who want healthy children but do not have a reliable source of information they can rely on.

This program aims to reach parents/caregivers of children aged 0–24 months through free telephone calls from the MASMIRAH platform. Age-appropriate information content is periodically provided to parents/caregivers who have signed up for the service, including nutrition, sanitation & hygiene practices, early stimulation and father involvement and family support. Information is provided in the form of special messages in the form of pre-recorded dialogues or monologues. Listeners can also navigate menus to select the information they want to hear and can make free calls or *short massage services* (SMS) to MASMIRAH numbers. This project will focus on updating the settings and content of the MASMIRAH platform, initial development of a monitoring mechanism and ensuring the readiness of the government to take over and maintain the platform in partnership with Cellular Service Providers and technical partners.

Based on the explanation above, Plan Indonesia with support from Plan Australia conducted baseline and endline studies to evaluate the implementation of the MASMIRAH project in districts/cities throughout Lombok Island, West Nusa Tenggara.

EVALUATION OBJECTIVES

These baseline and endline studies are expected to provide an overview of parents/caregivers and the capacity of stakeholders in child care and nutrition.

1) Assess the knowledge, attitudes and practices of parents/caregivers regarding parenting and nutrition to prevent stunting
2) Assess the existing support from midwives and other health workers in implementing stunting prevention programs and identify additional support needed to improve program outcomes
3) Identify existing policies and mechanisms from the government to collaborate on stunting prevention with MASMIRAH services .

EVALUATION QUESTIONS

1) What is the level of knowledge, attitudes and practices of parents/caregivers regarding parenting and nutrition in children to prevent stunting before and after the implementation of the MASMIRAH project?
2) What are the types of programs and related factors regarding stunting prevention?
3) What are the existing policies and mechanisms from the government to collaborate with MASMIRAH services?

LITERATURE REVIEWS

Stunting is a condition of failure to thrive in children under five years old due to chronic malnutrition so that children are too short for their age. Stunting is a condition where the child's height is too low. Stunting or too short based on age is height that is below minus three to below minus 2 standard deviations (-3 SD to <-2 SD) from the table of categories and thresholds for children's nutritional status (Ministry of Health, 2018) .

The causes of stunting are complex and multidimensional, but at least they can be classified into two, namely direct causes and indirect causes (UNICEF, 2013; Setwapres RI, 2019). The direct causes of stunting include nutritional intake and the health status of mothers and children. These two factors are indirectly influenced by access to nutritious food (food security), parenting practices (social environment), access to health services (health environment), and the adequacy of housing facilities (water and sanitation). These four factors are referred to as indirect causes of stunting. The indirect causes of stunting are also influenced by various factors, including social and economic conditions, such as income and social protection. This is as explained in the Concept Framework for the Causes and Prevention of Stunting in the National Strategy for Stunting (Figure 1).

Figure 1. The conceptual framework for the causes of stunting and its prevention (Source: Setwapres RI (2019), has been reworked : Agung & Dinda, 2021).

Efforts to accelerate the prevention and reduction of stunting require converged nutrition interventions, including specific nutrition interventions and sensitive nutrition interventions (Setwapres RI, 2019; WHO, 2014). Specific nutrition interventions address the direct causes of stunting and sensitive nutrition interventions address the indirect causes of stunting.

Specific nutrition interventions are carried out by overcoming the lack of nutritional intake and infectious diseases, which are generally carried out by the health sector. Specific nutritional interventions, including providing additional food for pregnant women with chronic energy deficiency and malnourished children, providing supplementation such as blood-boosting tablets and vitamins, promoting exclusive breastfeeding, and immunization (Setwapres RI, 2019). This is in line with previous studies that stunting can be prevented through fulfilling the nutrition of pregnant women and exclusive breastfeeding for 6 months (Sutarto, Mayasari, & Indriyani, 2018). Increasing the practice of exclusive breastfeeding for 6 months is a key intervention to ensure healthy child growth and development, because it provides protection against digestive system (gastrointestinal) infections which are one of the causes of stunting (WHO, 2014; Kramer & Kakuma, 2012). Immunization in toddlers is also important to build a child's immune system, where children who do not get complete basic immunization have a risk of stunting 4 times greater than those who receive complete basic immunization (Rahayuwati, et al., 2020).

STUDY METHOD

This study uses a quantitative and qualitative approach to achieve research objectives. The quantitative approach uses a survey approach to measure knowledge, attitudes and practices of pregnant women and parents/caregivers regarding child

care and nutrition to prevent nutritional problems, especially stunting (objective 1), while the qualitative approach uses focus group discussions (DKT) and interviews depth to measure all information related to the implementation of stunting prevention programs (objectives 2 and 3). This study was conducted in West Lombok, Central Lombok, East Lombok, North Lombok and Mataram City.

FINDINGS AND DISCUSSION

The study was conducted in 5 project areas namely Mataram City, West Lombok, Central Lombok, East Lombok and North Lombok Regencies. The amount of data collected came from 300 respondents (100% response rate) at the baseline and 312 respondents (100% response rate) at the endline. Respondents consisted of parents or caregivers of children aged 0-24 months with a total of 222 (74.0%) respondents at baseline and 277 (88.8%) respondents at endline and pregnant women 78 (26.0%) respondents at baseline and 35 (11.2%) of respondents on the endline. The distribution of respondents by district/city is presented in Figure 2.

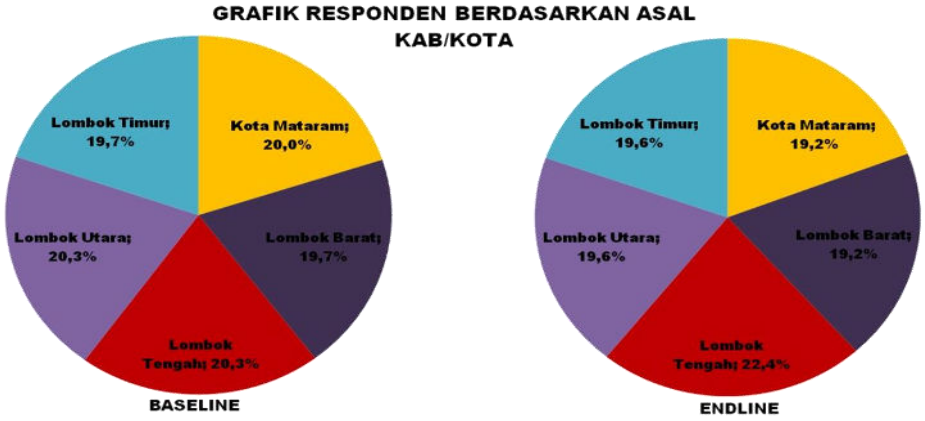


Figure 2. Distribution of Respondents by District/City of Origin.

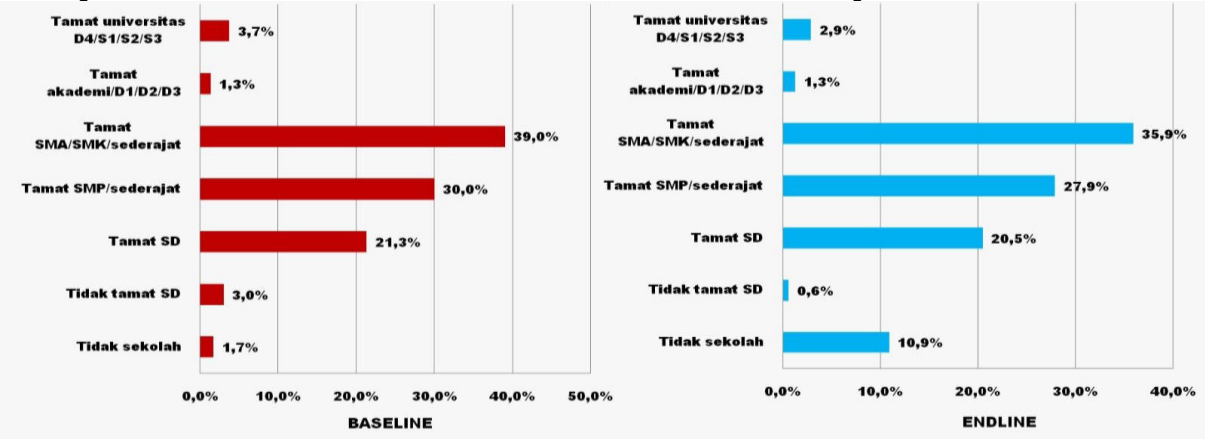
DEMOGRAPHIC CHARACTERISTICS

A total of 300 respondents were involved in this study, 74% of respondents were parents/caregivers of children aged 0-24 months and 26% of pregnant women. The average age of the respondents was 29 years, the youngest respondent was 15 years old and the oldest respondent was 53 years old. This demographic data illustrates that child marriage still exists, there are 7 mothers with an age range of 15-18 years. Teenage pregnancy is a global problem that occurs in high, middle and low income countries, including in Indonesia. Based on data released by the 2018 Susenas, the prevalence of child marriage in West Nusa Tenggara Province is 15.48%, the highest in the Java-Bali-Nusa Tenggara region (BPS and Kemenpppa, 2020). Early pregnancy increases the risk of death in girls due to complications of pregnancy and childbirth. Adolescent mothers face a higher risk of eclampsia, puerperal endometritis, and systemic infections (WHO, 2020).

Childbirth can increase the risk for newborns as well as young mothers. Babies born to mothers under the age of 20 face a higher risk of low birth weight, preterm labor and neonatal conditions. In some places, rapid repeated pregnancies

are a concern for young mothers, as they pose further health risks to both mother and child.

The education level of the respondents (pregnant women and their parents) is 56% low education level (ranging from never going to school to junior high school) and 44% higher education level (high school to bachelor/graduate). The distribution of respondents based on education level can be seen in Graph 1.



Graph 1. Distribution of Respondents Based on Last Education

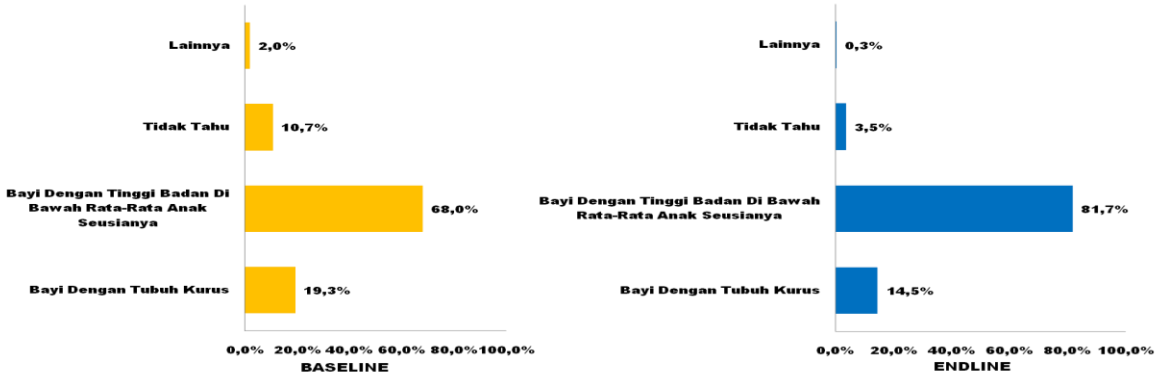
KNOWLEDGE, ATTITUDES, AND PRACTICES OF PARENTS/CAREERS & PREGNANT WOMEN ABOUT PARENTING AND NUTRITIONAL PATTERN TO PREVENT NUTRITION PROBLEMS, ESPECIALLY STUNTING

Level of Knowledge on Nutrition, Parenting and Pregnancy

The level of knowledge of parents and groups of pregnant women was assessed with structured questions. Respondents were asked to answer questions related to their knowledge of childcare, child nutrition, parenting styles, healthy pregnancies, clean living habits, and stunting. Some questions are tailored to the group of respondents (parents or pregnant women).

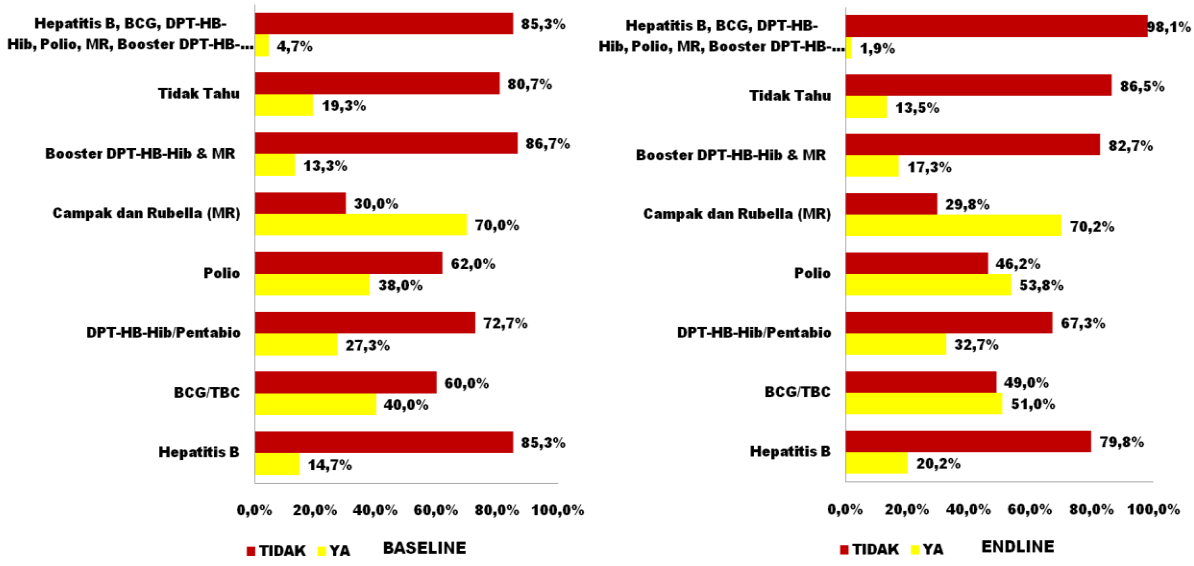
Based on the results of interviews, it was found that at the baseline, 56.3% of respondents had poor knowledge, 26.3% moderate knowledge, and 17.3% already had good knowledge. Meanwhile, in the endline data, it is known that 20.5% of respondents have less knowledge, 36.7% moderate knowledge, and 42.8% have good knowledge. So the results of the evaluation (baseline – endline) of MASMIRAH shows that there is an increase in respondents' knowledge about healthy pregnancies, nutrition and child care, clean living behavior, and stunting.

The data shows that the respondents' knowledge of the term stunting has increased after receiving intervention from the MASMIRAH project. 68% of respondents at the baseline and 81.7% of respondents at the endline answered correctly that stunting is a baby with low height for their age. However, there are still 18.3% of respondents who do not understand the term stunting. Some of the respondents' understanding of the term stunting which is still wrong include babies with thin bodies, children with worms, malnutrition, infant abnormalities, stupidity, and inactivity. Respondents' knowledge of the term stunting is presented in Graph 2.



Graph 2. Distribution of Respondents Based on Knowledge of the Term Stunting

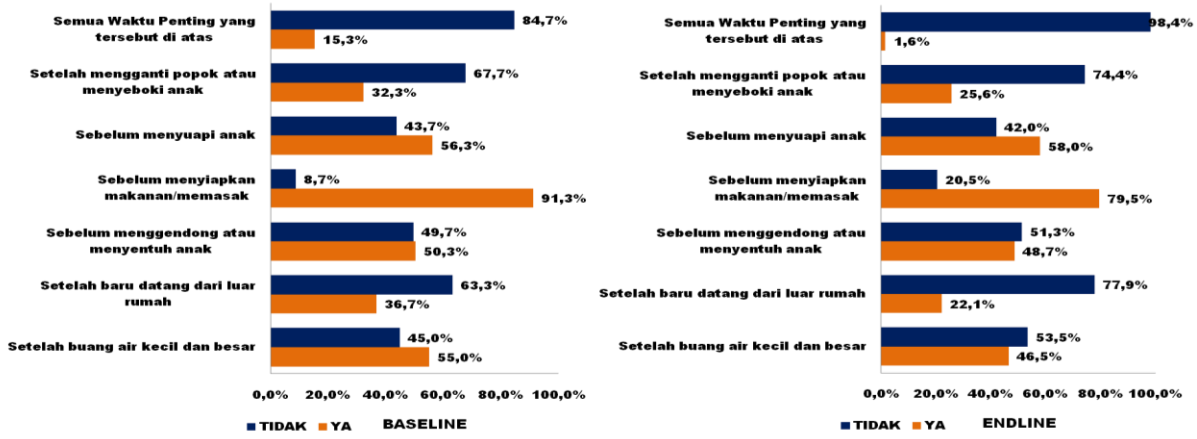
The national routine immunization program must be given to children aged 0-24 months (Ministry of Health RI, 2022). Immunizations are given to children through government health facilities, namely the Community Health Center (Puskesmas). One of the efforts to increase the accessibility of immunization programs for children in the village, immunization is carried out at Posyandu activities which are usually held every month in the village area. Information about immunization programs for children is also conveyed to parents through Posyandu or other health service facilities. After the MASMIRAH project intervention there was an increase in knowledge about the types of immunization for children. Among the 6 vaccines that must be given to children, the measles and rubella vaccines are the ones parents know best , about 70% of parents know their names, followed by BCG (40%), Polio (38%), and DPT-HB-HiB (27 %). There was a decrease from 19% to 13% in the number of respondents who did not know about the types of immunization for children. So information about mandatory immunization for children needs to be conveyed more frequently through various media, so that all parents understand the importance of this immunization. Respondents' answers about the types of immunization can be seen in Graph 3.



Graph 3. Respondents' Knowledge of Types of Compulsory Immunization for Children Up to 2 Years of Age (Baseline-Endline)

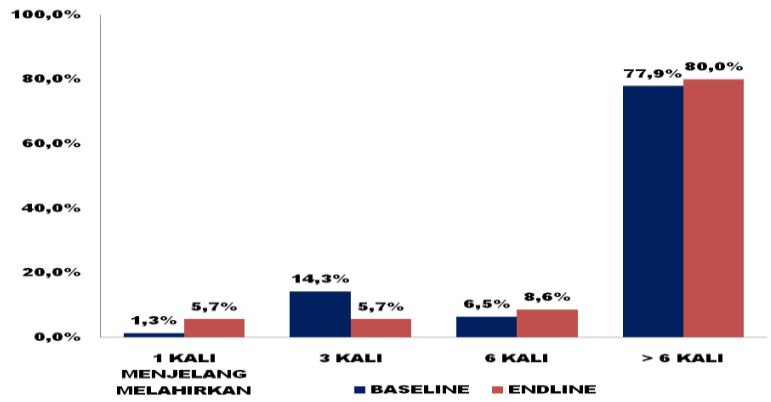
Hand washing is part of the 10 indicators of clean and healthy living behavior (PHBS) launched by the Indonesian Ministry of Health (Ministry of Health RI, 2016). Washing hands is the most effective way to get rid of germs, avoid getting sick, and prevent spreading germs to other people (Centers for Disease Control and Prevention (CDC, 2020). Germs can enter hands after coming into contact with dirty objects or after completing an activity , so that there are also key times that are important for hand washing.Knowledge about the important times for washing hands is expected to direct parents to practice hand ihygiene before contact with their children.

The data shows that respondents (91% at baseline and 99% at endline) answered that they knew the key times to wash their hands were before, during and after preparing food, followed by before feeding children (56% at baseline and 58% at endline). after using the toilet (55% at baseline and 46.5% at endline), and before touching or holding a child (50% at baseline and 49% at endline). However, only 32% at baseline and 25.6% at endline mentioned the importance of washing hands after changing a baby's diaper (Graph 4).



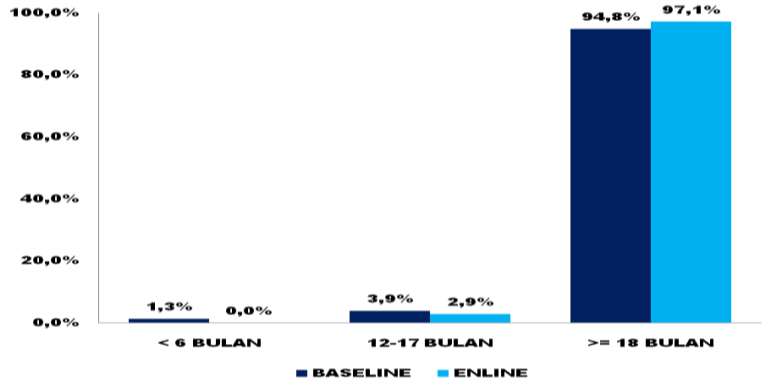
Graph 4. Respondents' Knowledge of the Important Time to Wash Hands

Furthermore, to examine the knowledge of pregnant women about healthy pregnancies and birth spacing, several specific questions were asked to pregnant women respondents. Respondents were asked about their knowledge about the frequency of antenatal visits to be made during pregnancy, the minimum birth spacing that would reduce high-risk pregnancies, and the signs of danger during pregnancy. Approximately 78% at baseline and 80% at endline, respondents answered that they had at least 6 antenatal visits (presented in Graph 5). WHO recommends a minimum of eight antenatal care contacts with health professionals during pregnancy to reduce perinatal mortality and improve the experience of care for pregnant women (WHO, 2022). Whereas in Indonesia, the antenatal care schedule is at least 4 times during pregnancy, namely once in the first trimester, once in the second trimester and twice in the third trimester (Ministry of Health RI, 2018).



Graph 5. Respondents' Knowledge of the Frequency of Examinations During Pregnancy

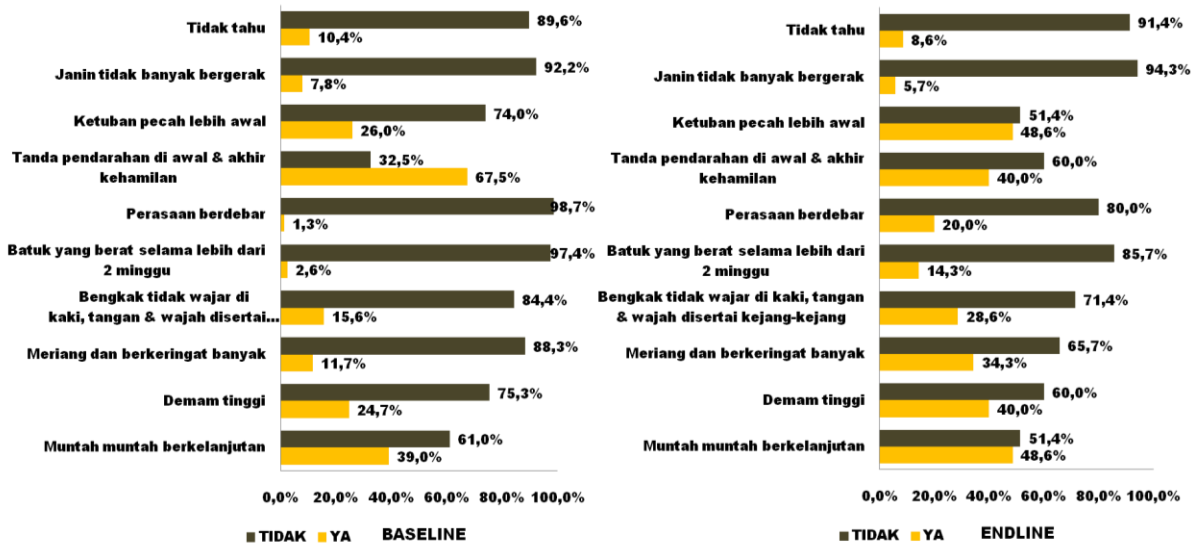
Birth spacing is important to avoid complications of pregnancy and childbirth. Birth spacing is part of the topic campaigned by the BKKBN/National Family Planning Coordinating Agency to reduce high-risk pregnancies known as 4T. The 4Ts to Avoid stands for "too young/early pregnancies, too old/advanced maternal age, too close/short-range pregnancies, and too frequent/too many pregnancies" (BKKBN, 2022). Knowledge of pregnant women respondents, most (95%) at baseline and (97%) at endline (Graph 6) answered that the minimum distance for the next pregnancy is more than 18 months. These results are in accordance with WHO recommendations for birth spacing, after the interval of live births, the next pregnancy is at least 24 months to reduce risks for the mother and adverse effects on the baby (WHO, 2006).



Graph 6. Knowledge of pregnant women about the ideal pregnancy spacing

Baseline and endline data show that pregnant women respondents experienced an increase in knowledge about danger signs during pregnancy, while the number of pregnant women who did not know about danger signs during pregnancy decreased. Danger signs of pregnancy that many respondents know are signs of bleeding at the beginning & end of pregnancy, continuous vomiting, and high fever. Respondents who did not know the danger signs of pregnancy decreased from 10.4% to 8.6% (presented in Graph 7). Information about danger signs during pregnancy is available in the Maternal and Child Health Book (KIA Book). Every pregnant woman who performs antenatal care at the Puskesmas or Posyandu (or other health service facilities provided by the government) will be given this book on her first visit. This book is used to record the growth of children from pregnancy until

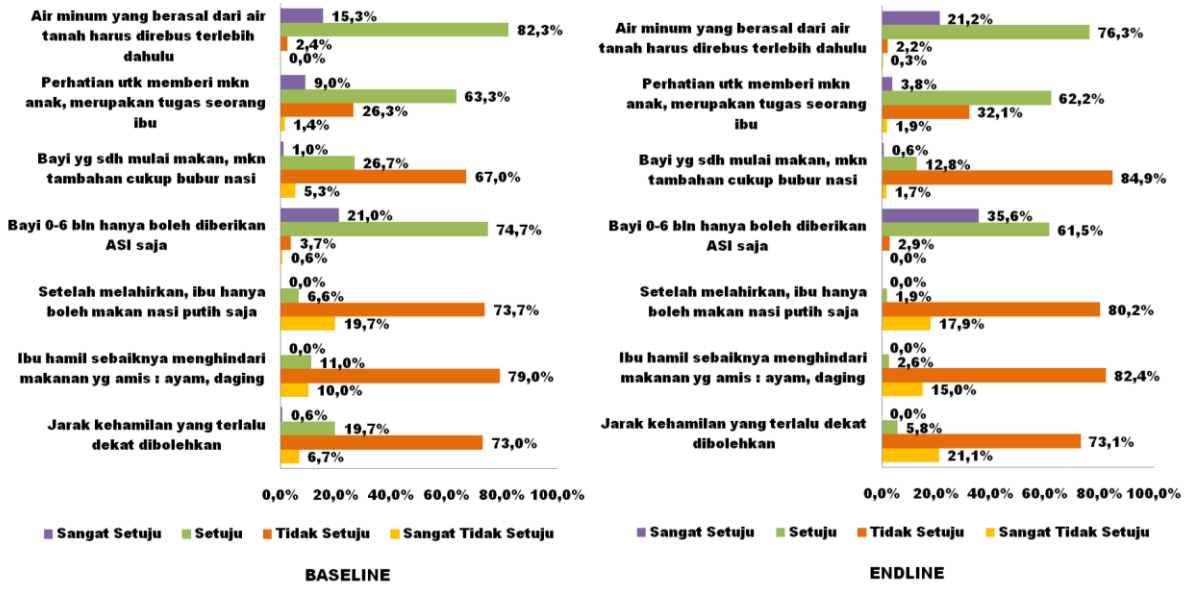
the child is 5 years old. Health workers were also asked to explain the purpose and procedures for using the book and recommend that parents read this book to understand healthy pregnancy and child health.



Graph 7. Knowledge of pregnant women about danger signs of pregnancy

ATTITUDES TO HEALTHY PREGNANCY, NUTRITION, AND CHILDREN

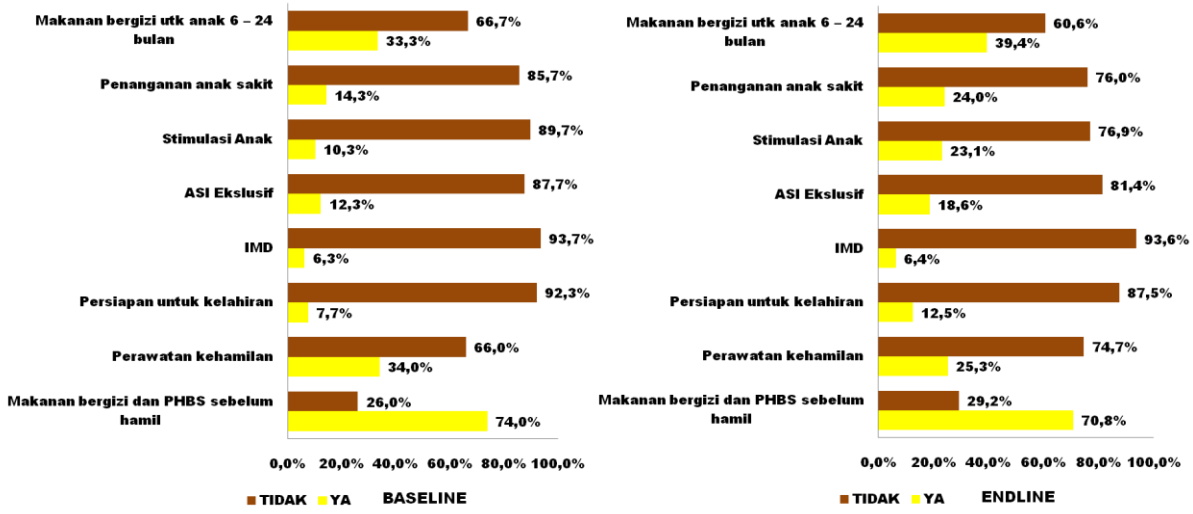
All respondents were asked to answer based on their perceptions of 7 statements related to healthy pregnancies, nutrition, parenting styles, and use of clean water. Most answered strongly disagree and disagree with short-term pregnancies (80% on the baseline and 94% on the endline), the myth of prohibiting eating fishy/animal food (89% on the baseline and 97% on the endline), the myth that mothers can only eat rice after delivery (94% at baseline and 98% at endline), and rice porridge is quite good for complementary feeding for children (72% at baseline and 87% at endline). Respondents answered that they strongly agreed and agreed about exclusive breastfeeding for infants aged 0-6 months (96% at baseline and 97% at endline) and water should be boiled before consumption (97% at baseline and 98% at endline). However, for statements about equality in parenting, most of them strongly agreed and agreed that feeding children is an obligation for mothers (72% at baseline and 66% at endline). This illustrates that the responsibility of feeding children is still firmly attached to the mother's role. So the data shows that after the MASMIRAH project intervention, there was an improvement in respondents' attitudes about pregnancy, nutrition, and stunting, especially in terms of : pregnancy spacing, food for pregnant & lactating women, exclusive breastfeeding, MP-ASI and good drinking water. Respondents' attitudes towards pregnancy nutrition and child rearing are presented in Graph 8.



Graph 8. Respondents' Attitudes on Pregnancy, Nutrition, and Stunting (baseline-endline e)

BEHAVIOR REGARDING PREGNANCY, NUTRITION AND STUNTING

Respondents (pregnant women and parents/caregivers) received information from midwives and other health workers. The data shows that the information obtained from midwives or other health workers, mostly about nutritious food and clean & healthy lifestyle before pregnancy (74%), nutritious food for children aged 6 – 24 months 39%), pregnancy care (34%) , handling sick children (24%), child stimulation (23%), exclusive breastfeeding (19%), preparation for birth (13%), and early initiation of breastfeeding/IMD (6%) (presented in Graph 9) . Some other information is immunization, family planning, physical activity, and health maintenance. The evaluation showed an increase in the information obtained by respondents about nutrition and pregnancy. Apart from Posyandu, most of these sources of information were obtained from the Puskesmas and midwives or cadres during home visits.



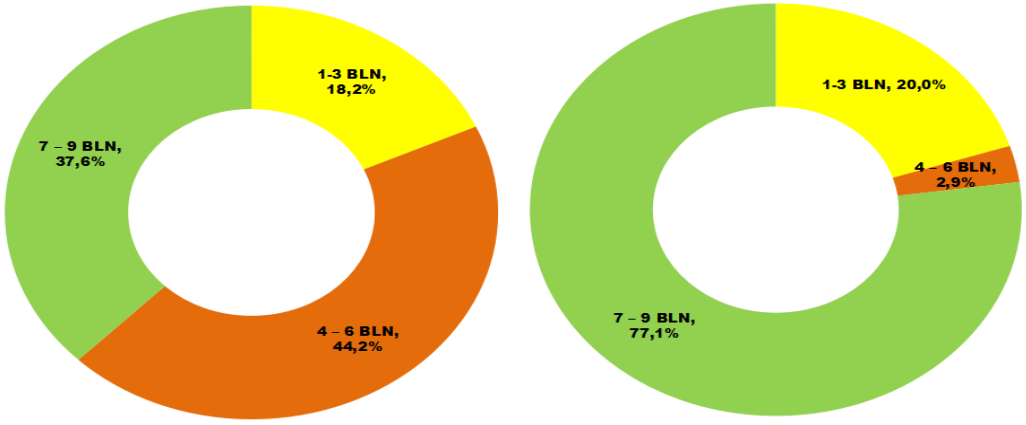
Graph 9. Types of Information Obtained from Midwives/Health Workers

The more frequently respondents are exposed to information about stunting, the better their understanding will be. After the intervention through the MASMIRAH project, there was an increase (from 73.3% to 89.7 %) of respondents who had received information about stunting more than once, while the number of respondents who had never received information about stunting decreased (from 10.7% to 1 ,9%). Sources of information about stunting, aside from the MASMIRAH project, were also obtained mostly from midwives/health workers/health cadres and some respondents got information from friends/family, posters, internet, social media, advertisements on television, associations of pregnant women, and YouTube.

HEALTHY PREGNANCY PRACTICES

To examine healthy pregnancy practices, pregnant women were asked about their daily practices during pregnancy, such as the antenatal care visits they had performed, iron supplementation, the appearance of danger signs during pregnancy, nutritional intake, and the husband's involvement in support health care during pregnancy.

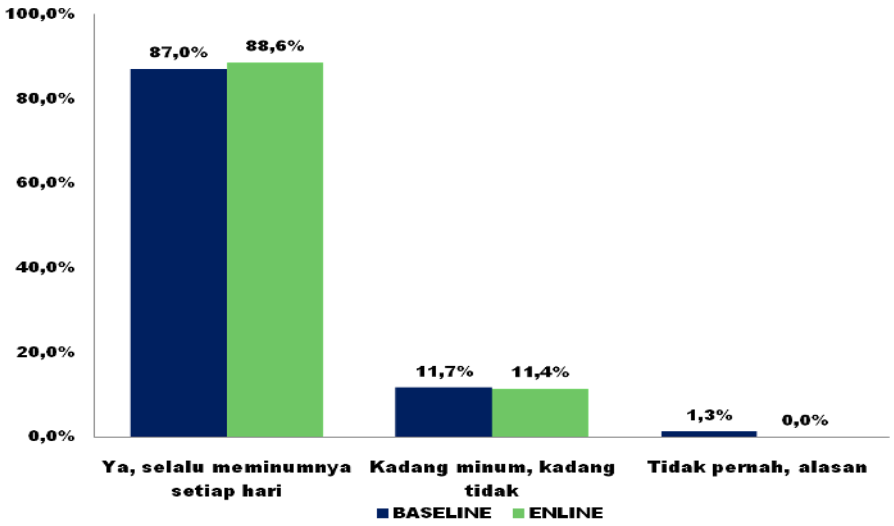
Most of the baseline pregnant women respondents were in the second (44.16%) and third (37.66%) trimesters of pregnancy, while at the endline most of the respondents were in the third trimester of pregnancy (77.14%), as presented in Graph 10 . Almost all respondents (95%) made at least one antenatal care visit during the first trimester of pregnancy (Graph 10). Respondents who made antenatal care visits during the second trimester at least once were 91%. Antenatal care visits during the second trimester should be done 2 times. 53% of respondents in trimester 3 visited at least 3 times. This result is in accordance with the recommendation of the Minister of Health of the Republic of Indonesia regarding the frequency of antenatal care visits during pregnancy, namely at least 6 times.



Graph 10. Distribution of Pregnant Women Based on Gestational Age

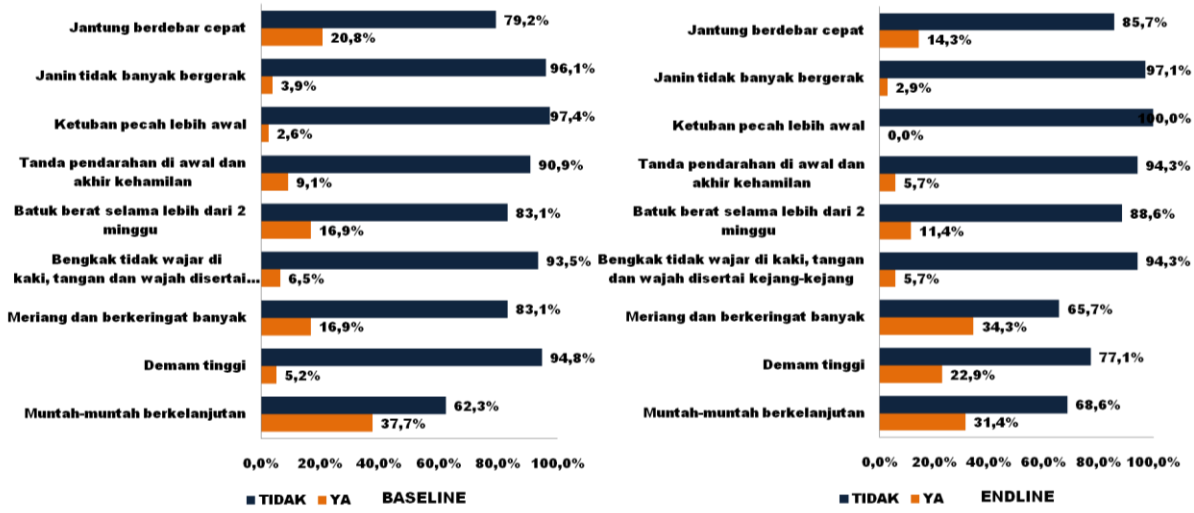
During antenatal care visits, pregnant women are also advised to take iron supplements. Iron supplementation which also contains folic acid is part of the maternal health program by the Indonesian Ministry of Health to reduce anemia, prevent eclampsia, and increase nutritional intake for fetal growth and development. Pregnant women must take a minimum of 90 tablets of iron supplementation

(Ministry of Health, 2020). Endline data shows that all pregnant women have received blood supplement tablets (TTD) and most (88.6%) have consumed them regularly every day. However, there were still respondents (11.4%) who did not routinely/disorderly take iron tablets (Graph 11). The reason for not taking iron tablets regularly was because the aroma of iron tablets was unacceptable and some mothers bought other brands of iron tablets (different from the iron tablets provided by the program).



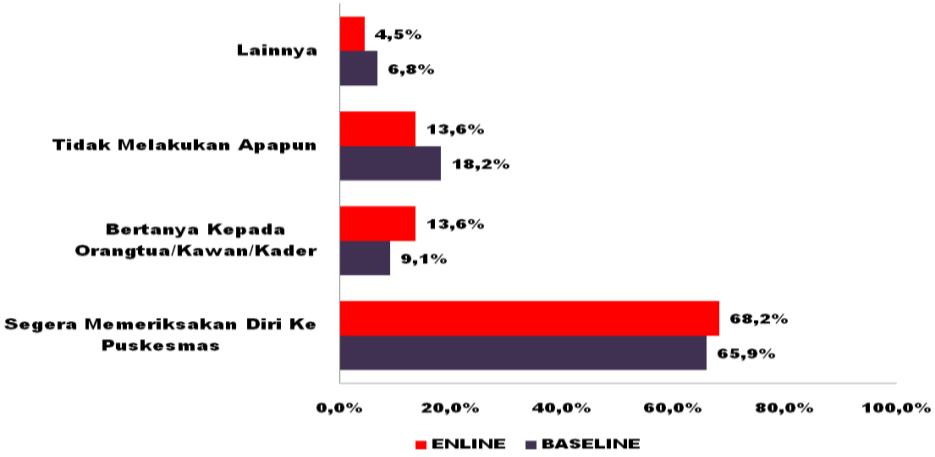
Graph 11. Distribution of Pregnant Women Based on Taking Iron Tablets

Some pregnant women respondents experienced danger signs during pregnancy. The most frequent danger sign in pregnant women respondents was continuous vomiting (38% at baseline and 31% at endline) mostly in the first semester of pregnancy. Followed by racing heart (21% at baseline and 14% at endline), chills and profuse sweating (17% at baseline and 34% at endline), and severe cough for more than 2 weeks (17% at baseline and 11% at endlines). The rarest sign is premature rupture of membranes (3% at baseline and 0% at the endline). Completely presented in Graph 12.



Graph 12. Signs of Danger Experiencing Mothers During Pregnancy

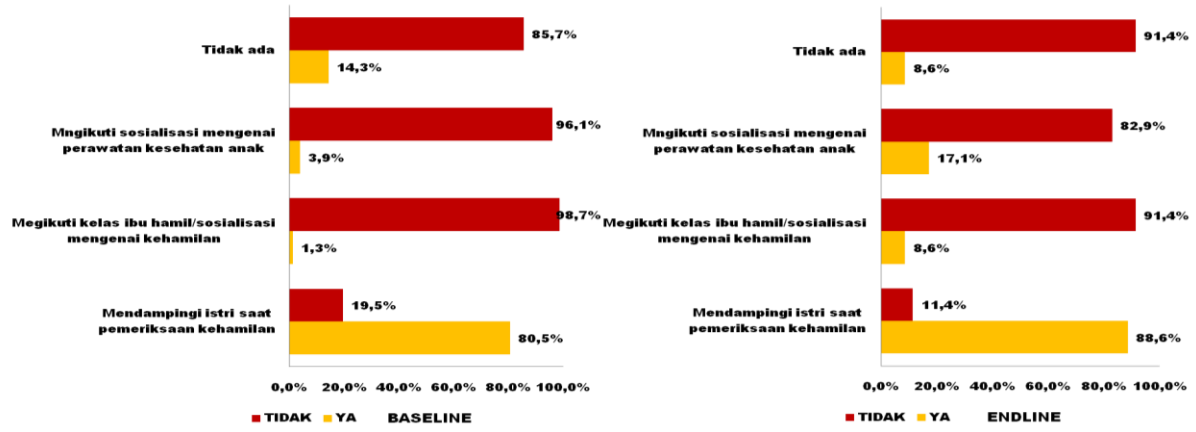
After the MASMIRAH Project there was an increase (from 37.7% to 42.9%) in the behavior of pregnant women respondents who experienced danger signs during pregnancy to immediately go to the Puskesmas (Graph 13). The most influential person in deciding whether a mother should receive medical assistance at the health center or hospital is her husband (87% at baseline and 91.4% at endline). Meanwhile, pregnant women who experienced warning signs but did nothing were found in 11% at the baseline and 9% at the endline.



Graph 13. Distribution of Pregnant Women Based on Behavior If Experiencing Danger Signs During Pregnancy

Nutritional requirements during pregnancy differ significantly compared to non-pregnant women. During pregnancy, caloric intake will increase by about 300 kcal/day. The recommended protein intake during pregnancy is 60 g/day (A. Kominiarek & Rajan, 2016). Therefore pregnant women need to meet their nutritional needs to achieve optimal fetal growth. Most of the respondents (97.4 %) had no restrictions on certain foods. Only a small number of respondents (2.6%) abstained from certain foods, namely cob allergies , eating meat made mothers nauseous and vomiting, still believed in the myth of not being able to eat sea fish, not being able to eat raw vegetables, alcoholic beverages, and soft drinks.

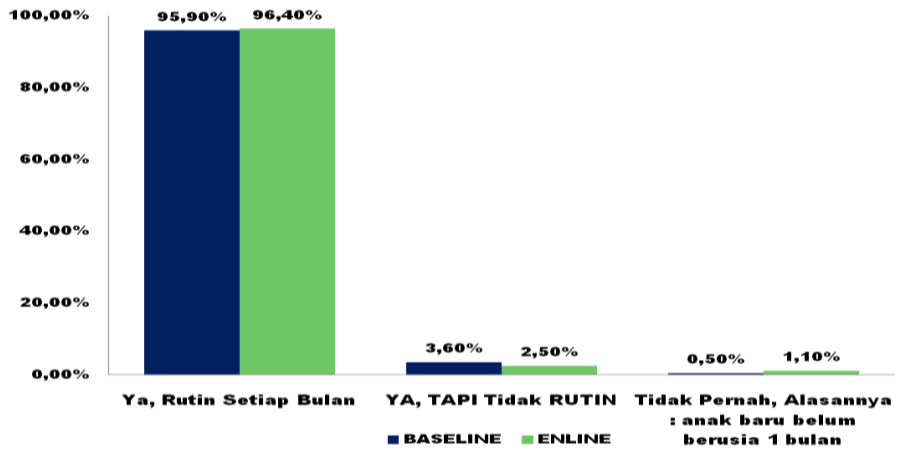
The husband's role during pregnancy is important, the involvement and support of the baby's father during pregnancy is associated with improving the mother's mental health and can contribute to the depressed temperament of the baby (Stapleton, et al., 2012). The most frequent forms of support provided by husbands during pregnancy were accompanying their wives during pregnancy checks (81 % at baseline and 89% at endline), participating in socialization regarding child care (3.9% at baseline and 17.1% at endline), and attending socialization during pregnancy (1.3% in baselie and 8.6% in endline). However, there were also respondents (14% at the baseline and 9% at the endline) who answered that they did not receive any support from their husbands. After the MASMIRAH Project, there was an increase in the behavior of husbands involved in the pregnancy process, namely accompanying their wives during health checks and a decrease in the number of husbands who did not provide any support to their wives during pregnancy (Graph 14).



Graph 14. Husband's Involvement in the Pregnancy Process

CHILDREN PRACTICES

Respondents (parents/caregivers) were asked about practices in caring for children aged 0-24 months. Some of the questions that have been asked include attendance at Posyandu, breastfeeding practices, complementary feeding, father's involvement in parenting, immunization history, and types of food and drink consumed by children in the last 24 hours. The health facility that provides routine consultations for children managed by the village is the Posyandu, supported by midwives from the Puskesmas. Posyandu is held once a month in several places to increase the accessibility of parents. Toddlers and pregnant women are advised to make regular visits for mother and child checks at the Posyandu. The results of the interviews show that 95% of the respondents' parents _/caregivers brought their children for routine checks to the Posyandu, 4% of the respondents attended the Posyandu but not routinely, and 1% of the respondents had never attended the Posyandu on the grounds that the child was not yet 1 month old when the Posyandu was held (presented in Graph 15).



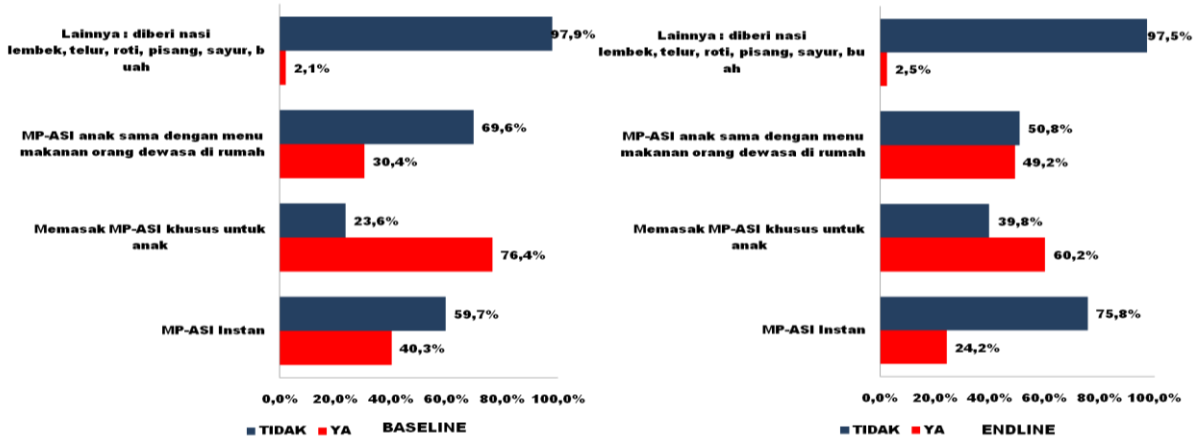
Graph 15. Distribution of Toddlers Based on Attendance at Posyandu

At the time of the interview, most of the children (87% at baseline and 82% at the endline) were still getting breast milk. Meanwhile, children who are not getting breast milk, some of the reasons given are: the child is more than 24 months old, the child's tongue has thrush, the child is only given breast milk for 1 year, the mother has an infection in the nipple, the nipple does not come out, the mother works in the market and Mother work abroad.

Most of the respondents (92% at baseline and 97% at endline) revealed that at the age of 0-6 months children were only given breast milk. It was found that respondents (8% at the baseline and 3% at the endline) had given food/drink to children aged 0-6 months, with the excuse of being given water to take medicine, taught since the age of 3 months, initially tried at the age of 5 months, given a banana by her grandmother, the milk has decreased, the milk is not flowing smoothly, the milk does not come out, the mother goes to work, and the nipples of the mother's breasts do not come out.

Breast milk is the ideal food for babies that is safe, clean, contains complete nutrition and antibodies that help protect against various diseases in childhood and support the growth of the baby. Breastfeeding is one of the most effective ways to ensure a child's health and survival. WHO and UNICEF recommend exclusive breastfeeding for 6 months for infants, after which the baby must receive complementary food along with breast milk until they are 2 years old (WHO, 2011). This is in accordance with previous studies that stunting can be prevented through fulfilling the nutrition of pregnant women and exclusive breastfeeding for 6 months (Sutarto, Mayasari, & Indriyani, 2018). Increasing the practice of exclusive breastfeeding for 6 months is a key intervention to ensure optimal child growth and development, because it provides protection against digestive system (gastrointestinal) infections which are the cause of stunting (WHO, 2014; Kramer & Kakuma, 2012).

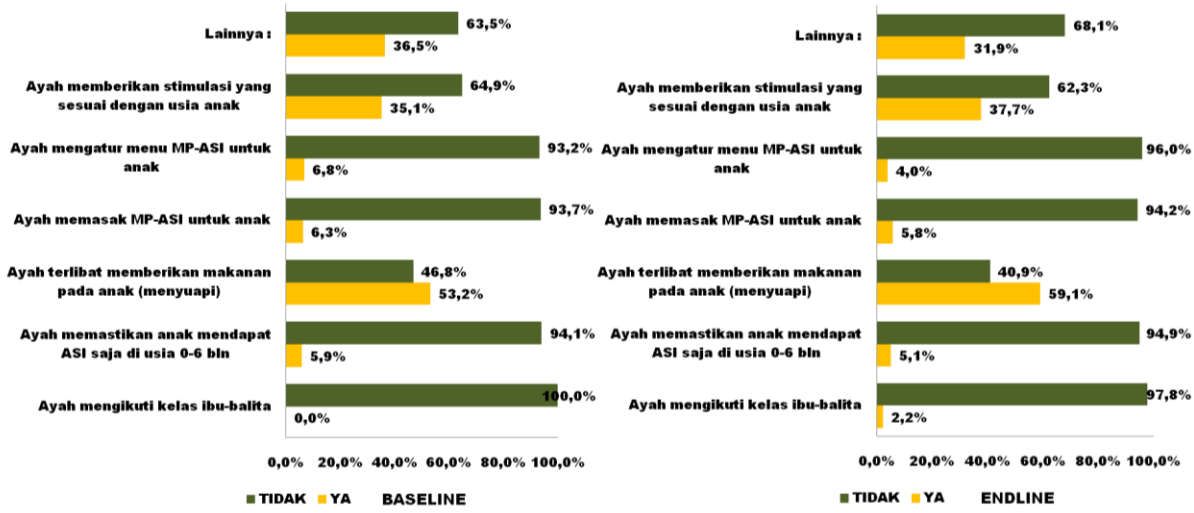
Based on WHO recommendations, children should receive complementary foods after 6 months of age. The results of the interviews found that 97 % of children were ready to start eating complementary foods for breast milk. The types of complementary foods that are usually consumed by children are parents cooking MP-ASI specifically for their children (76% at baseline and 60% at the endline), children's MP-ASI is the same as the adult food menu at home (30% at baseline and 49% at endline), and provide instant MPASI that has been provided in the market (40% at baseline and 24% at endline). Data is presented in Graph 16.



Graph 16. Distribution of Toddlers Based on Types of MP-ASI Usually Consumed

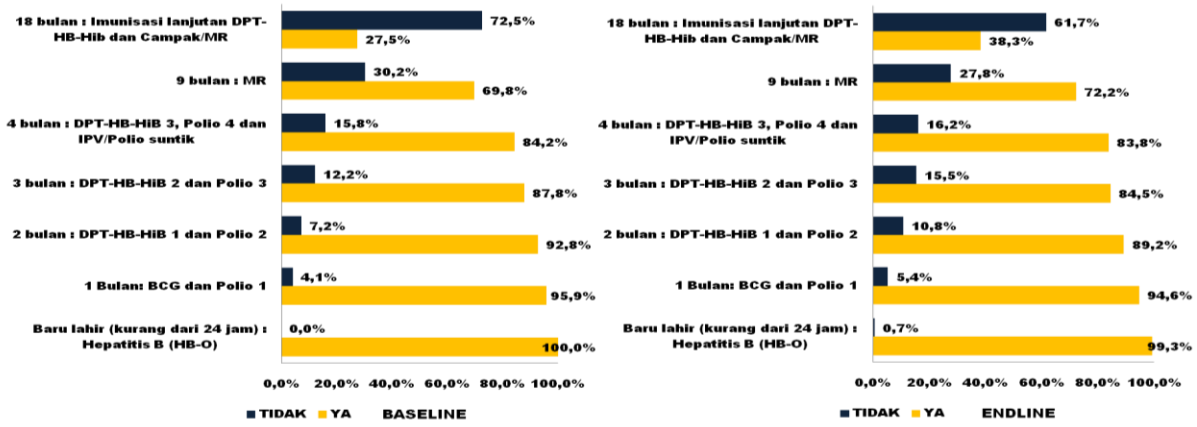
The obstacles faced by parents/caregivers when providing MP-ASI are children having difficulty eating (45% at baseline and 38% at endline), variations in MP-ASI menus that are known to be limited (21% at baseline and 7% at endline), and the other children are picky about food, only want to eat snacks, only want to eat vegetables, often vomit, and often get sick.

Based on several studies, it is revealed that father involvement increases children's development to positive outcomes, higher IQ, advanced linguistic skills and cognitive aspects, and improves quantitative and verbal skills (Ancell, Bruns, & Chitiyo, 2016). This study shows that the most frequent form of father involvement in childcare is involved in feeding children (53% at baseline and 59% at endline), fathers provide stimulation according to the child's age (35% at baseline and 38% at endline), and help parenting (37% at baseline and 32% at endline). There are also 6% of all respondents whose fathers have never been involved in raising children because they work abroad. Father's involvement in childcare is presented in Graph 17.



Graph 17. Father's Involvement in Child Care

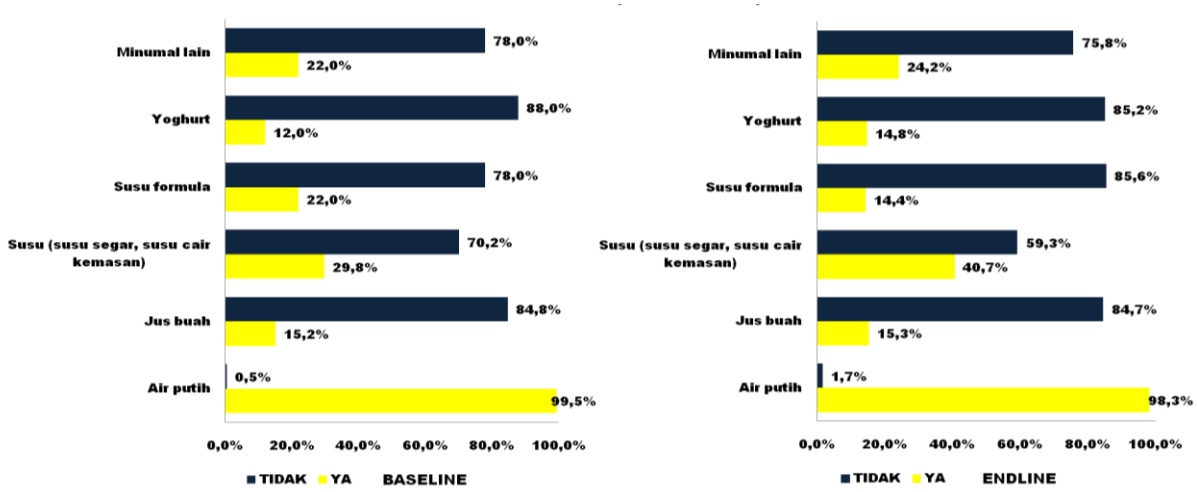
Children up to 24 months should be given the vaccines included in the immunization program. Some of the mandatory vaccines are hepatitis B (HB-O), BCG, polio, diphtheria-pertussis-tetanus, haemophilus influenzae type B, measles and rubella which will be given to children according to their age. All respondents had received the hepatitis B vaccine at the age of 0-7 days after birth. Percentage of toddlers who received vaccines included in the immunization program as follows, BCG and Polio 1 at 1 month old 96%, DPT-Hep B-HiB and Polio 2 at 2 months old 93%, DPT-Hep B-HiB 2 and Polio 3 at 3 months 88%, DPT-Hep B-HiB 3 and Polio 4 at 4 months 85%, measles & rubella at 9 months 70%, and DPT-Hep B-HiB booster and measles & rubella at 18- 24 months (28%) (Graph 18). Immunization in toddlers is very important to build a child's immune system, where children who do not get complete basic immunization have a 4 times greater risk of stunting compared to those who do (Rahayuwati, et al., 2020).



Graph 18. Distribution of Toddlers by Type of Immunizations Received

Types of Food and Drinks Consumed by Children Aged 6 – 24 Months

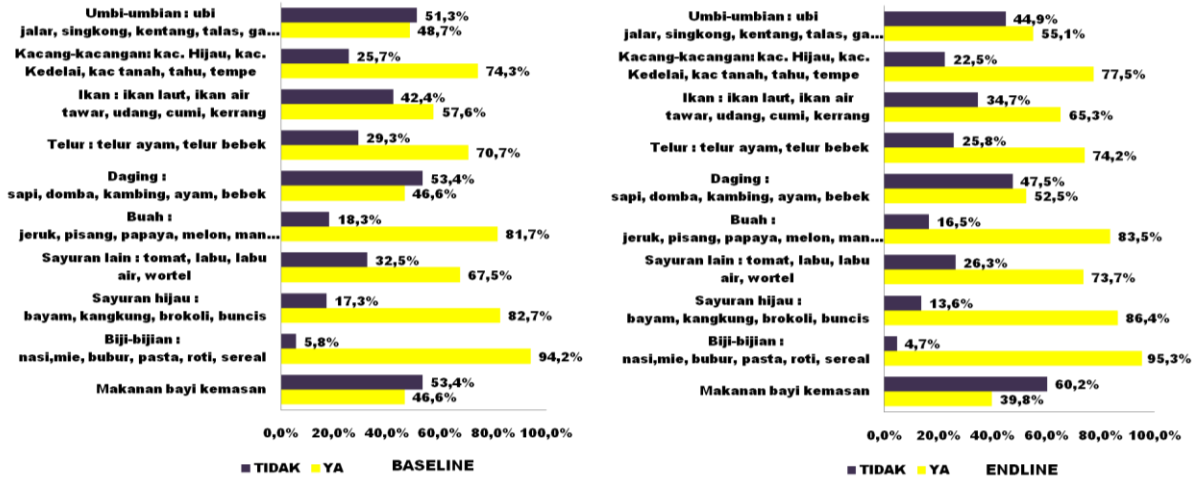
To obtain information about the types of food and drink consumed by children in the last 24 hours, interviews with parents/caregivers were conducted. Data on the base line and end line show that the most consumed types of drinks are water (99% and 98%), milk (30% and 41%), infant formula (22% and 15%), fruit juice (15 %), yogurt (12% and 15%), and other drinks (22% and 24%). Other drinks are packaged drinks such as tea or fruit flavored drinks (Chart 19). Among the 22% of children who consume formula milk, the average frequency of consumption of formula is twice a day.



Graph 19. Distribution of children aged 6 – 24 months based on the type of drink they drink

The foods most consumed by children were whole grains (94% at baseline and 95% at endline), green vegetables (83% at baseline and 86% at endline), fruits (82% at baseline and 84% at endline) , legumes (mung beans, soybeans, tempeh) 74% at baseline and 78% at endline, eggs (71% at baseline and 74% at endline), fish (58% at baseline and 65% at endline), tubers -tubers (sweet potatoes, potatoes) 49% at baseline and 55% at baseline, and meat (47% at baseline and 53% at endline) (Graph 2 0) . The average frequency of eating is 4 times a day. The evaluation results show that after the MASMIRAH program, the types of food consumed by children are

increasingly diverse. The food diversity factor that reflects food quality has an influence on height growth and the incidence of stunting in toddlers (Arimond & Ruel, 2004; Widyaningsih, et al, 2018).



Graph 20. Distribution of Children Aged 6 – 24 Months Based on the Type of Food Eaten

EXISTING SUPPORT FROM MIDWIVES AND OTHER HEALTH PERSONNEL IN THE FRAMEWORK OF IMPLEMENTING THE STUNTING PREVENTION PROGRAM

The types of stunting prevention programs that have been implemented are the implementation of *antenatal care* according to standards, classes for pregnant women (counseling, demonstrations on making nutritious food, and nutritional counseling for pregnant women), classes for mothers under five (counseling on exclusive breastfeeding, MPASI, timely immunization according to age), TPK (Family Assistance Team) providing assistance to pregnant women, postpartum mothers, mothers of babies and toddlers, prospective brides (catin), catin health checks, education on catin, SDIDTK (Stimulation of Detection and Early Intervention of Child Development) in infants and toddlers, PMT (Supplementary Feeding) for pregnant women, toddlers at risk of stunting, undernourished toddlers, screening of toddlers at risk of stunting (weighing week), education on targets (adolescent girls, pregnant women, mothers of toddlers) about stunting, distribution of iron supplement tablets to pregnant women and young women, practice of PMBA (Feeding of Infants and Children), outreach from MASMIRAH about complementary feeding for babies 6-12 months, 12-60 months, and pregnant women, outreach to the community regarding clean water and sanitation, discussion of TTD for junior and senior high school students in the working area of the Labuapi Health Center, in Telagawaru Village there will be assistance in 2022 from the Indonesian trade forum in the form of PMT for 4 months, assistance from the world bank for Human Development Cadres in budget advocacy for stunting.

In implementing the stunting prevention program, it refers to several guidelines issued by Ministries/Institutions, Work Units, and others. The guidelines used as the basis for implementing the stunting prevention program include the Decision Letter (SK) for the pregnant women class team, Standard Operation Procedures (SOP) for the implementation of the pregnant women class, toddler class, nutrition class for stunting prevention, Maternal and Child Health Book (KIA),

Schedule monitoring and evaluation (SDIDTKA), stunting prevention book (KEMENKES), IYCF handbook, decree on posyandu implementation, guidebook from MASMIRAH "Stunting prevention guide", Presidential Decree no. 72 of 2021 concerning accelerating the reduction of stunting, guidelines for essential neonatal management, SK from the stunting management team at the puskesmas level, technical technical guidelines on the distribution of iron supplements to young women, SOP on weighing week and PMBA, decree from the healthy kitchen team from the sub-district, which is a program of BKKBN activities, Data from P2KB (population control and family planning), leaflets and guidebooks on stunting prevention and the causes of stunting.

The various parties involved in implementing the stunting prevention program are:

1. The Village Head plays a role in providing supplementary food (PMT) and other budgets for stunting
2. Religious and community leaders play a role in educating the public and providing support for stunting prevention
3. Posyandu cadres play a role in targeting, planning activities at the hamlet level, carrying out posyandu activities (weighing, etc.), reporting the results of activities at the posyandu, and assisting in local PMT activities
4. Health personnel (midwives, nutritionists, health promotion, and others) play a role in monitoring the success of 1000 HPK children, conducting integrated *antenatal care* (ANC), increasing deliveries in health facilities, filling in activities for pregnant women classes, nutrition classes and toddler classes, conducting monitoring growth and development for toddlers
5. Health promotion (Promkes) has a role as an agent of health promotion in the community, distributing counseling media both directly and social media (face book, website, youtube, tik tok).
6. Participate in nutrition class activities, pregnant women class, toddler class and provide counseling related to existing problems
7. The School Health Business Teacher (UKS) assists in the distribution of Blood Supplement Tablets (TTD) and deworming drugs in schools, anemia screening in Junior High School children (SMP), monitors the implementation of PMT
8. Community leaders and religious leaders directed youth to join youth posyandu in order to get Blood Supplement Tablets.
9. Village midwives play a role in screening/examination of pregnant women, assisting pregnant women, childbirth, breastfeeding, monitoring the growth of babies, especially those born with low birth weight babies at posyandu and home visits.
10. The food security agency and housing agency play a role in handling food insecure families
11. PLAN, idea, CSR from indomart, alfamart, Dharma Wanita Kejaksaan, IIDI (Association of Indonesian Doctors' Wives) Mataram City Providing Supplementary Food
12. Mataram Polytechnic Health Department of Nutrition in community service activities.

To support the implementation of the stunting prevention program, a budget has been allocated for the intended activity, namely the Health Center budgeting local supplementary feeding for KEK mothers, Anemia, Nutrition Class, Pregnant Women Class, and Toddler Class, Health Office in the form of milk (Lactogen 6-11 months , milk for toddlers 1-3 years, milk for toddlers 4-5 years), the Village budgets PMT for stunted toddlers, BOK for funds for implementing nutrition classes, pregnant women, toddlers & counseling media. In addition, there are also facilities

and infrastructure used to support the stunting prevention program, scales, the MCH Handbook, length boards, stadiometers, microtoise and mats . special place).

The MCH handbook as one of the references in implementing stunting prevention programs has not been used optimally. Mothers only used the MCH Handbook during visits to posyandu. Meanwhile, mothers who use the MCH Handbook at Posyandu are used to complete their own KMS (posyandu smart), guide early stimulation for children and toddlers, monitor the types of immunizations that have been given, and to determine the nutritional status of children: red, yellow , green .

One of the stunting prevention programs is education given to parents regarding the care and feeding of children. The type of education provided includes complementary feeding according to the age of 6-11 months, a variety of complementary foods for children, the amount & frequency of child feeding, the benefits of exclusive breastfeeding, education on balanced nutritional feeding, explaining the contents of the MCH handbook, maintaining hygiene and sanitation, introducing local PMT , and the correct use or method of using iodized salt. The media used in providing education are MCH books, leaflets, posters, brochures, stickers, baby dolls, social media (website, face book, instagram, tick tock, youtube), flipcharts, food models and media in the form of photographs. about good parenting.

The results of focus group discussions with related parties revealed that the target recipients of education were enthusiastic in participating in activities, very happy because they received information about childcare, and even more enthusiastic when there was supplementary feeding for children and it was very beneficial from not understanding to understanding and trying to practice what who have been educated.

However, there are still some obstacles in providing education to parents of toddlers. These obstacles include babies and children who are invited during crying or fussing activities, husbands who are invited are often absent (not present), time for activities is adjusted for mothers/fathers, many are absent, knowledge is sufficient but practice is still lacking, attendance is not on time , parents or the community often think that education related to health is not important, and there are some target parents who have a low economy, lack of human resources (some do not go to school

Based on the results of the focus group discussions, it was found that efforts to overcome the obstacles encountered in providing education were carried out through

1. Planning the right time / right so that attendance is 100%
2. A representative place (easy to reach and comfortable)
3. Adequate facilities and infrastructure
4. Precise and clear guide
5. Interesting media for education
6. Providing support, namely by directing mothers to come to activities

Meanwhile, various obstacles and challenges faced in efforts to prevent stunting include :

1. Not all family members support stunting prevention
2. Family understanding of stunting is still lacking
3. Understanding the signs of stunting is difficult to understand
4. The head of the family/decision maker in the family is still lacking in supporting stunting prevention programs
5. Unsupportive environment (slum environment)
6. Low family income

7. The parenting style is that the mother lacks attention, the child is entrusted to a grandmother with low education because the mother becomes a migrant worker
8. There are divorced families and child marriages
9. Reducing the behavior of consuming animal protein, vegetables, fruit and exclusive breastfeeding. Foods consumed such as sweet potatoes, rice porridge, cassava, corn (the dominant source of carbohydrates)
10. There are still many children who are entrusted to their grandmother when they go to the posyandu
11. There is no awig-awig in the village, especially regarding child marriage

Furthermore, the suggestions expressed by related parties to overcome these obstacles are:

1. Presenting the head of the family/closest person during mother class activities, and others.
2. Providing education to families about nutritious food does not have to be expensive
3. Educating the community or mothers of toddlers about the correct feeding time, namely not consuming snacks before the main meal
4. Involve community leaders, religious leaders, and traditional leaders
5. Education about diet, parenting and sanitation
6. Improve environmental hygiene and implement clean living

EXISTING POLICIES AND MECHANISM FROM THE GOVERNMENT TO COLLABORATE WITH MASMIRAH SERVICES

In 2022, the main reference for tackling stunting will be Presidential Regulation (Perpres) No. 72 of 2021 concerning accelerating the reduction of stunting. Furthermore, it was determined that the chief executive for accelerating stunting would be the BKKBN. BKKBN then issued Regulation of the Head of BKKBN No. 12 of 2021 concerning the national action plan to accelerate the reduction of stunting in Indonesia. Based on Governor's Decree No. 050.13/107/2022 concerning the formation of the team and the TPPS Secretariat (Team for the Acceleration of Stunting Reduction) in the Province of NTB. This is the main reference for work, in addition to other derivatives, in the province itself the main ones such as Bappeda, Health, PMD have regulations but still adopt two direct regulations to accelerate the reduction of stunting.

Bappeda is a coordinating function in the implementation of the stunting prevention program. When BKKBN was appointed as chief executive, every year we made regulations for the team. For 2022 SK Governor No. 050.13/107/2022 regarding the formation of a team and the TPPS Secretariat (team to accelerate stunting reduction) in the province of NTB. In the SK, there is already a coordinative division, Bappeda has the role of deputy chairman (Head of Bappeda), the second role is as the person in charge for the coordination and convergence of stunting implementation, usually the third echelon level.

One of Bappeda's tasks is a coordinating function: *So learning from 2021, the first is that many of the coordination mechanisms are partial, meaning they are working on their own, such as the Dinas themselves, Bappeda itself. In a coordinative manner, the form of activity is usually in the form of a meeting, for example a working meeting at the beginning of the year by inviting TPPS, in the middle every 3-4 months there are monitoring and evaluation activities for various stunting programs in all related OPDs, both directly (specific) and indirectly (sensitive).*

Furthermore, regarding Human Resources (HR) involved in supporting the stunting prevention program in 2022:

"We have assistance because BKKBN is the Chief Executive, BKKBN has a stunting task force for stunting management, meaning those who serve as Secretariat are at BKKBN and Bappeda, BKKBN is handled by the stunting task force and Bapeda is handled by friends at GEN (Golden Generation of West Nusa Tenggara)."

"Apart from that, we have also formed a kind of association of stunting experts representing the main OPs, namely representatives from the Health Office, Bappeda, DPMPD, including universities and independent experts. For the past 4 years, there has also been assistance from Binabangda , the Ministry of Home Affairs through TAP (Central Expert Staff). So there are 3, namely GEN from Bappeda, the stunting task force and the Expert Team Association.

Apart from the Government, programs/projects from non-governmental organizations that assist the role of the BKKBN/Health Office/DP3AKB/BAPPEDA to support the implementation of stunting prevention programs also exist, such as: PLAN, UNICEF with its partners, and others. Furthermore, Bappeda consolidates and directs the locus of stunting that has been determined by the Regency/City.

However, there are still obstacles and challenges in implementing stunting prevention programs. *In districts, stunting convergence action requires assistance. So what is lacking is consolidation, there are still some kind of tangled threads. Our challenge is that the implementation of activities is still partial and the lack of consolidation. So there must be an active role for Bappeda and the team to consolidate the parties involved with the program, activities, budget and locus must be re-integrated* .

The hope to overcome the existing obstacles and challenges is that experts from the center will continue. Experts are expected to play a role in reminding local governments, providing technical guidance to Regencies/Cities as loci for handling stunting. In addition, collaboration with universities is needed, especially in data management.

So the handling of stunting needs cross-sectoral coordination and involves various stakeholders, namely the government, the business world, the community and others. Mitigation efforts are carried out by the government through specific interventions, carried out by the Ministry of Health, Provincial and District/City Services as well as sensitive interventions related to environmental health, poverty alleviation, and women's empowerment.

Various efforts have been made to reduce the prevalence of stunting including interventions in the first 1,000 days of life, seeking integrated quality assurance of antenatal care (ANC), increasing deliveries in health facilities, organizing high-calorie, protein-dense feeding programs, early detection of diseases (infectious and non-infectious). infection), eradication of helminthiasis, increase utilization of Maternal and Child Health Books (KIA), organize Early Breastfeeding Initiation (IMD) counseling and exclusive breastfeeding, and family planning (KB) counseling and services.

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSION

The results of the evaluation showed that there was a tendency to increase knowledge, improve attitudes, and behavior of respondents regarding healthy pregnancies, nutrition and child rearing in efforts to prevent stunting after the implementation of the MASMIRAH Project.

68% of respondents at the baseline and 81.7% of respondents at the endline answered correctly that stunting is a baby with low height for their age. Among the 6 vaccines that must be given to children, the measles and rubella vaccines are the ones parents know best . Most of the respondents, namely 91% at the baseline and 99% at the endline, answered that they knew the key time to wash their hands. About 78% at baseline and 80% at endline, respondents answered that they had at least 6 antenatal visits. Most (95%) at baseline (97%) and at endline answered that the minimum distance for the next pregnancy was more than 18 months.

After the MASMIRAH Project, there was an improvement in respondents' attitudes about pregnancy, nutrition, and stunting, especially in terms of pregnancy spacing, food for pregnant and lactating women, exclusive breastfeeding, MP-ASI and good drinking water. Information obtained from midwives or other health workers, mostly about: nutritious food and clean & healthy lifestyle before pregnancy (74%), nutritious food for children aged 6 – 24 months 39%). All pregnant women have received blood supplement tablets (TTD) and most (88.6%) have consumed them regularly every day. However, there were still respondents (11.4%) who did not drink regularly/disorderly.

Midwives and other health workers as well as various other parties have been heavily involved in various stunting prevention programs, namely health checks for pregnant women, various education using various media (fresh food, leaflets, banners, posters, flipcharts, food models, MCH books, stickers, photographs, and dolls) for nutrition classes, pregnant women classes, and toddler classes, special budgeting funds from the Health Service, Community Health Centers, & Village Funds.

The government and various non-government agencies have been involved in the convergence program to accelerate stunting reduction, chaired by the BKKBN in collaboration with the Health Office, the P3A Service, and the Food Security Service under the coordination of the Bappeda.

Several non-governmental organizations involved in handling stunting in West Nusa Tenggara Province include the Indonesian International Plan, UNICEF and their partners, and others.

this study has limitations in terms of differences in respondents at the baseline and endline, several substances of the questionnaire need to be revised, including knowledge (true/false), determining nutrient intake, and measuring the nutritional status of pregnant women and toddlers.

RECOMMENDATION

Education through the MASMIRAH platform deserves to be continued as an effort to support stunting prevention. The MASMIRAH platform has the potential to collaborate with government programs for stunting prevention such as nutrition classes, pregnant women classes, and toddler classes. The targets involved in these classes are also participants in the MASMIRAH platform education.

The targets that have been educated through the MASMIRAH platform, especially families who have toddlers at risk of stunting and pregnant women, should provide assistance on the importance of implementing healthy pregnancies, balanced nutrition, and clean and healthy living behavior by posyandu cadres in collaboration with the head of the environment or the head of the hamlet under assisted by village midwives and nutrition staff from the Community Health Center (Pusat Kesehatan Masyarakat).

The need for advocacy to the sub-district/village authorities regarding the importance of paying attention to pregnant women and families with stunted toddlers by budgeting special funds (priority) to improve the health of stunted pregnant women and toddlers, for example providing additional food in the form of animal protein (eggs, fish, etc.) twice a week and assistance by posyandu cadres.

The results of the study show that the MASMIRAH platform provides benefits to the community so platform flexibility needs to be carried out by using media that is easily accessible, cost efficient, attractive, and accommodates substance improvements according to the needs of the community (especially the people of West Nusa Tenggara).

In series with the baseline and endline study activities on the MASMIRAH platform, the study results were disseminated and discussions were carried out with related parties (BKKBN, Social Service, P3A, Health Service, Community Health Centers, Youth Representatives, Religious Leaders, Indonesian International PLAN Partners in NTB). Some of the inputs in this activity that can be considered for the development and sustainability of the MASMIRAH platform are :

1. Messages are adapted to the local context, presenting messages more in the form of interactive dialogue (accompanied by a conducive situation), if possible visualized so that it is more evocative and interesting and easier to understand.
2. parents of toddlers today come from the millennial generation, so communication patterns for the millennial generation must be adjusted to suit what is felt and expected.
3. The substance of the MASMIRAH platform refers to the book Maternal and Child Health (KIA), associated with religious messages, emphasizing gender equality, especially in childcare.
4. Masmirah content is landed, not just by air so that it can synergize with activities at posyandu, nutrition class, mother class, and toddler class, as well as involve posyandu cadres and extension workers from BKKBN

5. The people of NTB are people who take part in religious figures , for example: a mother whose husband prohibits her from going to the posyandu, so the role of religious leaders needs to be involved and hold discussions with the Sasak Traditional Council.
6. Adolescents also need educational information like this, preferably in this program involving adolescents in disseminating information to family, peers, or the wider community. Teenagers are parents-to-be, so through this involvement they will get education as early as possible.
7. Some indicators of masmirah success can be seen from
    - Reducing the age of child marriage
    - Increased knowledge and attitudes related to child care and fulfillment of child nutrition
    - Increasing the role of fathers in parenting
    - Family economic management that has priority to fulfill children's rights
    - Actively helping and seeking family menus that meet children's nutritional needs.

BIBLIOGRAPHY

A. Kominiarek, M., & Rajan, P. (2016). Nutrition Recommendations in Pregnancy and Lactation. Medical Clinics of North America, 1199-1215.

Agung Lestanto NR and Dinda Dea Pramaputri. 2021. Biplot Analysis of Government Performance in Handling Stunting in Indonesia. Journal of Indonesian State Budget and Finance Vol. 3 No. 1 (2021).

Ancell, KS, Bruns, DA, & Chitiyo, J. (2016). The Importance of Father Involvement in Early Childhood Programs. Young Exceptional Children, 22-33.

Arimond, M., & Ruel, MT (2004). Dietary Diversity Is Associated with Child Nutritional Status: Evidence from 11 Demographic and Health Surveys. The Journal of Nutrition, 134(10):2579–2585.

Apriluana, G., & Fikawati, S. (2018). Analysis of Risk Factors for Stunting in Toddlers (0-59 Months) in Developing Countries and Southeast Asia. Health Research and Development Media, 28(4): 247-256.

Ayuningtyas D, Hapsari D, Rachmalina R, et al. Geographic and socioeconomic disparity in child undernutrition across 514 districts in Indonesia. Nutrients. 2022; 14(4):843.

BKKBN. (2022, June). BKKBN. Retrieved from KBKR: https://cis.bkkbn.go.id/kbkr/?p=16

BPS and Kemenppa. (2020). Prevention of Child Marriage: Acceleration That Cannot Be Delayed. Jakarta: Unicef.

Centers for Disease Control and Prevention (CDC). (2020, September 10). Show Me the Science - Why Wash Your Hands? Retrieved from Handwashing in

Community Settings: https://www.cdc.gov/handwashing/why-handwashing.html#eight

Grantham-McGregor, S., Cheung, YB, Cueto, S., Glewwe, P., Richter, L., & Strupp, B. (2007). Developmental Potential in the First 5 Years for Children in Developing Countries. The Lancet, Child Development In Developing Countries, 369(9555):60-70.

Hoddinott, J., Alderman, H., Behrman, JR, Haddad, L., & Horton, S. (2013). The Economic Rationale for Investing in Stunting Reduction. Maternal and Child Nutrition, Suppl 2:69- 82.

Ministry of Health of the Republic of Indonesia. National Riskesdas Report 2018. Jakarta: Health Research and Development Agency; 2019.

Ministry of Health. (2020). Guidelines for Giving Blood Supplement Tablets for Pregnant Women during the COVID-19 Pandemic. Retrieved from file:///D:/My%20Documents/My%20Downloads/files99516TTD_BUMIL_OK2.pdf

Indonesian Ministry of Health. (2016, January 1). PHBS. Retrieved from Directorate of Health Promotion and Community Empowerment: https://promkes.kemkes.go.id/phbs

Indonesian Ministry of Health. (2018, August 12). The Importance of Pregnancy Examination (ANC) in Health Facilities. Retrieved from the Directorate of Health Promotion and Community Empowerment: https://promkes.kemkes.go.id/pentingnya-pemeriksaan-kehamilan-anc-di-facility-kesehatan

Indonesian Ministry of Health. (2022, June 20). Immunization Situation and Analysis. Retrieved from Data and Information Technology Center of the Republic of Indonesia Ministry of Health: https://pusdatin.kemkes.go.id/download.php?file=download/pusdatin/infodatin/infodatin-imunisasi.pdf

Kramer, MS, & Kakuma, R. (2012). Optimal Duration of Exclusive Breastfeeding. Cochrane Database Syst Rev, (8):CD003517.

Prendergast, AJ, & Humphrey, JH (2014). The Stunting Syndrome in Developing Countries. Paediatrics and International Child Health, 34(4): 250–265.

Rahayuwati, L., Nurhidayah, I., Hidayati, NO, Hendrawati, S., Agustina, HS, Ekawati, R., & Setiawan, AS (2020). Analysis of factors affecting the prevalence of stunting in children under five years. EurAsian Journal of BioSciences, 14, 6725-6735.

RI. Ministry of Health. (2018). The Situation of Short Toddlers (Stunting) in Indonesia. Health Data and Information Window Bulletin.

Deputy Presidential Secretariat of the Republic of Indonesia. (2019). National Strategy for the Acceleration of Stunting Prevention, Period 2018-2024. Jakarta: Secretariat of the Vice President of the Republic of Indonesia.

Stapleton, LR, Schetter, CD, Westling, E., Rini, C., Glynn, LM, Hobel, CJ, & Sandman, CA (2012). Perceived Partner Support in Pregnancy Predicts Lower Maternal and Infant Distress. Journal of Family Psychology 26(3), 453-463.

Sutarto, Mayasari, D., & Indriyani, R. (2018). Stunting, Risk Factors and Prevention. Agromedicine, 5: 540 – 545.

UNICEF. (2013). Improving Child Nutrition: The achievable imperative for global progress. New York: United Nations Children's Fund.

Widyaningsih, NN, Kusnandar, & Anantanyu, S. (2018). Food diversity, parenting patterns and the incidence of stunting in toddlers aged 24-59 months. Indonesian Nutrition Journal, 7, 22 – 29.

WHO. (2006). Birth spacing — report from a WHO technical consultation. Geneva: WHO.

WHO. (2011, January 15). Breastfeeding. Retrieved from Nutrition: https://apps.who.int/mediacentre/news/statements/2011/breastfeeding_20110115
/en/index. html

WHO. (2020, January 31). Adolescent pregnancy. Retrieved from WHO: https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy

WHO. (2022, June 23). New guidelines on antenatal care for a positive pregnancy experience. Retrieved from WHO: https://apps.who.int/iris/bitstream/handle/10665/259947/WHO-RHR-18.02-eng.pdf