STUNTING PREVENTION PROGRAM
WEST JAVA

Final Report for Dharma Care

A. About the Report

According to the Indonesian Health Ministry, in 2022, Indonesia's stunting prevalence decreased to 21.6 percent from 24.4 percent in 2021. The government's target is to reach 14% stunting prevalence by 2024. West Java itself went from 24.5% in 2021 to 20.2% in 2022. There are multiple factors that cause stunting, amongst them are repeated infections, the lack of health services and anemia. To tackle anemia in pregnant women, the Ministry of Health is providing iron supplements to adolescent girls and pregnant women. In line with the government's programs, YUM also provided iron and folic acid supplements to pregnant women who are part of this program.

To reduce the number of stunted children in West Java, especially in YUM's working area, YUM collaborated with 10 *Posyandu* in 6 villages and 49 women volunteer health workers (or *kader*). The program focused on assisting pregnant mothers through nutritional food package distribution and also encouraged women *kader* to increase their skills and knowledge through Training of Trainers and interpersonal skill training.

This report aims to present our findings after the one-year project period of March 2022 to February 2023. In total, close to 500 babies, pregnant and breastfeeding mothers and *kader* have benefited directly from the program.

B. Project Summary

1. Working with 10 Posyandu in 6 villages

After one year of the program, all of the *Posyandu* are implementing the five-table system, which qualifies for excellent service. Most of them have 5 *kader*, except for one *Posyandu* which only has 4 because the number of participants is less than 40 toddlers. During the project period, the average number of babies and toddlers benefiting from the *Posyandu* services were 676 per month.

2. Support to pregnant mothers

With the target of 100 pregnant mothers at the beginning of the project, YUM successfully distributed nutritional packages to a total of 172 pregnant mothers. Each month around 94 nutritional packages were delivered to these mothers-to-be. YUM also provided iron and Folic acid supplement tablets to all pregnant mothers of the program. Specifically, for pregnant mothers with iron deficiency, they received double doses of iron supplement tablets. According to the government's recommendation, in order to prevent stunting, pregnant mothers have to consume one egg per day. Therefore, every month, our nutritional packages always contained eggs.

3. Collecting data on stunting

Of the 172 pregnant mothers, 100 babies were born during the project period. Data collected indicated that 46 % of the children were born normal above standard, 51% normal below standard and *only 3% were stunted*. YUM also recorded each child's growth until they turned 6 months old and the results showed 47% of the children are normal above standard, 53% normal below standard and *0% stunted children*.

Besides the 100 babies born from the pregnant mothers who were part of the program, we also collected data from 41 babies born during the same period and from mothers outside of the project group. The data found that only 24% of the children were born normal above standard, 59% normal below standard and 17% were stunted. When these babies turned 6 months old, the result showed that no baby was normal above standard, 31% were normal below standard and *69% children were stunted*.

4. Training women volunteers

A total of 49 *kader* took part in the project. Every month they have to attend a health education workshop delivered by a community leader. YUM handpicked a selected number of *kader* who had already participated in a previous stunting prevention program in their working area. Having seen their potential as an agent of social change, these 15 women were invited to attend a 4-day interpersonal skills training which included discussions on leadership, teamwork, public speaking, advocacy as well as reinforcing their knowledge around stunting, child development and pre and postnatal care. These *kader* became community leaders, and provided mentorship and knowledge training to 49 other women *kader*.

During ten months, nine topics were covered on a monthly basis: Stunting, Anemia, Anthropometry, Vitamin A and Deworming, Good Parenting, Nutrition for pregnant women, All about Breast Milk, Complementary Food for Babies and Children, Hygiene and Sanitation. Overall, 79% of the *kader* felt they had increased their knowledge on each topic.

C. Project Activities for Pregnant Mothers

1. Mid- upper arm Circumference (MUAC) assessment

Maternal MUAC during pregnancy is an indicator of the mother's nutritional status and their baby's growth during early life. The normal value of the MUAC needs to be more than 23,5 cm.

2. Blood Pressure Check

During pregnancy, the mother's blood pressure should stay within the normal range. An abnormal blood pressure during pregnancy is a cause for concern. Both the mother and the baby may be at an increased risk of health complications.

3. Regular Data Collection of Weight and Height

The amount of weight gain during pregnancy is important for the health of the mother's pregnancy and for the long-term health of mother and the baby.

4. **Fundal Height check**

Measuring fundal height helps healthcareproviders assess if the fetus is developing correctly. It also can help determine gestational age (term to describe how far along the pregnancy is) and the fetus's position in your uterus.

5.Haemoglobin level check

During pregnancy the mother should have a normal level of hemoglobin. To monitor their condition, the mothers get two free hemoglobin level tests in the first and the third semester of pregnancy.

6. Iron and Folic Acid Distribution

Iron and folic acid supplements are used to treat and prevent low blood levels. Severe iron deficiency or "severe anemia" during pregnancy increases the risk of premature birth while Iron deficiency "anemia" during pregnancy is also associated with having a low birth weight and postpartum depression.

7. Tetanus Toxoid (TT) vaccine

To prevent the risk of tetanus during pregnancy, mothers are administered at least 2 doses of tetanus toxoid. The 1st dose as soon as possible during pregnancy and the 2nd dose at least 4 weeks after the
1st and at least 2 weeks before the due date.

8. Health Information Workshop

Women health workers have to deliver knowledge about health information with different topics to pregnant mothers every month.

D. Project Activities for Babies and Toddlers

1. Complementary Nutrition

In order to provide an example to parents on how to prepare good nutrition for their children, every month YUM distributes various types of nutritional food, such as a traditional snack, fresh fruits, boiled egg and milk.

2. Regular data collection of weight and height

To find out the nutritional status of children who participate in the *Posyandu* activity, every month volunteer health workers collect the data of weight and height.

3. Health Consultation

All of the *Posyandu* participants have a chance to consult their children to a midwife or a health staff member. So, the mother is able to know their baby's condition regularly.

4. Deworming Treatment in March and September

Deworming is a method that uses medication to get rid of intestinal parasites and other microbes. Albendazole is the best medicine for deworming for children.

5. Vitamin A Distribution in February and August

Supplementing children under five with two doses of vitamin A per year reduces incidence of diarrhoea, and incrementally reduces the odds of child stunting.

6. Vaccines

The Primary Healthcare Center (known as *Puskesmas*) provides free vaccination. There are 5 types of vaccination that should be provided to all children from 0-month-old, i.e.: BCG, Measles, DPT- HB-Hib, Hepatitis B and Polio.

E. Project Implementation

1. Distribution of Basic Food Packages to Pregnant and Breastfeeding Mothers

To maintain a healthy pregnancy, approximately 300 extra calories are needed each day. These calories should come from a balanced diet of protein, fruits, vegetables and whole grains. *Sweets and fats* should be kept to a minimum. A healthy, well-balanced diet can also help to reduce some pregnancy symptoms, such as nausea and constipation. While growing a healthy baby, the pregnant mothers need rest, a clean environment, pregnancy healthcare, and a healthy nutritious diet.

In order to support the pregnant mothers in the program, YUM successfully delivered 1,029 nutritional food packages or an average of 94 packages per month. The nutritional food packages consist of carbohydrates (potatoes, sweet potatoes, sweet corn), protein (eggs, chicken, milk) fruits and vegetables. Every month they received different types of groceries, except for the eggs.

Eggs are one of the most nutritious foods available and can make an important contribution to a healthy, balanced diet for pregnant women, helping them to achieve necessary intakes of vitamins and minerals, some of which aren't found in many other foods.

Recent breakthrough research studies have shown[1] that an egg a day has the potential to significantly improve growth and reduce stunting. With this reason, YUM decided to provide eggs in food packages every month. To improve their intake, YUM staff and volunteer health workers always remind pregnant mothers to consume eggs regularly.

During the running of the program YUM successfully assisted 172 pregnant mothers. The average age of the women supported is between 20 and 35 years old (74%) and only 9% who were older than 35 years old. The total babies born are 100 babies.

Pregnancy and breastfeeding are the most nutritionally demanding times of a woman's life. The body needs enough nutrients every day to maintain its needs and also to support the growth of a baby. Pregnant and breastfeeding women need more nutrients than other women. It is important to consume balanced meals that have a variety of foods, including

[1] *https://www.wvi.org/stories/health/indonesia-eggciting-project-helps-reduce-stunting-rates*

fruits and vegetables, whole grains, lean protein and low-fat dairy products. To find out dietary changes of our beneficiaries, YUM interviewed them at the beginning and end of the intervention through food frequency questionnaires. The result showed in general they consume rice as their main food at the beginning of intervention, but after intervention they also consume white bread and potato. While for protein, at the beginning of the intervention, they rarely consumed high amounts of protein, most of them consuming tempeh and tofu quite often. However, after the intervention, they also consumed egg, mung bean, red bean and powdered milk.

2. Distribution of Iron and Folic Acid Supplement Tablets and implementing a hemoglobin level check for 172 Pregnant mothers in 6 villages

Daily iron and folic acid supplementation are currently recommended by WHO as part of antenatal care, to reduce the risk of low birth weight, maternal anaemia and iron deficiency. The suggested dose is 120 mg elemental iron and 2800 µg (2.8 mg) folic acid provided weekly throughout the pregnancy, beginning as early as possible after conception.

Anaemia during pregnancy places women at risk for poor pregnancy outcomes, including maternal mortality; it also increases the risks for perinatal mortality, premature birth and low birth weight. Related to reducing the prevalence of anaemia during pregnancy, every month YUM distributed iron and folic acid supplementation to all pregnant mothers of the program. To monitor haemoglobin level of all pregnant mothers, YUM also provides free Hb level check for them in their 1st and 3rd trimester pregnancy. Every month an average of 23 pregnant mothers had their Hb level checked, and the result showed 69% had normal haemoglobin level, 19% were found to have iron deficiency (high risk of anemia) and 12% had high Hb levels which can lead to blood coagulation.

3. To support the integrated healthcare posts (*Posyandu*) and volunteer health workers to ensure access to key health service for pregnant mothers and children under 5 years old

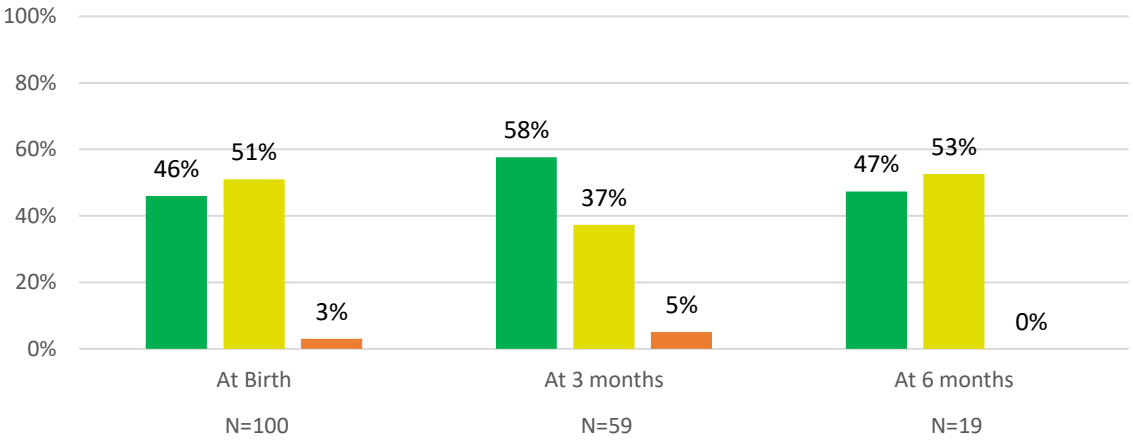
Health services for children and pregnant mothers are the main programs at the *Posyandu*. For children, it is early detection of any disorder of growth and development, while for mothers (pregnant and nursing) it is as a counselling place, weight monitoring, iron tablet

distribution and preparation for safe delivery care. Based on our observation and monitoring of the 10 *Posyandu*, all of them are now implementing these programs with excellent service.

February, March, August and September are important months for children to get Vitamin A and deworming treatment. All *kader* have to make sure that all children who are 6-59 months get vitamin A and children who are 12 – 29 months get deworming treatment. If they couldn't come to *Posyandu*, the *kader* have to visit the child's house to provide Vitamin A and deworming treatment.

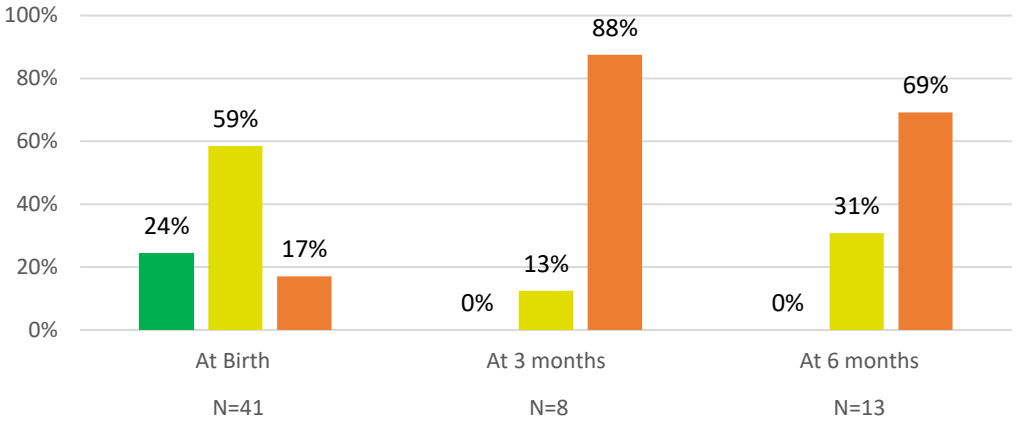
Since our program focuses on stunting prevention, to define a child as being stunted or not, every month our *kader* have to record the height measurement of all of the participants especially the babies under 2 years old. In terms of data collection, we created 2 groups, i.e.: babies of pregnant mothers participating in the project (**group 1**) and babies of mothers not participating in the project (**group 2**).

Group 1: Babies born to mothers in the program



At birth, only 3% of babies are born stunted. In Month 6, these babies were no longer stunted.

Group 2: Babies born to mothers outside the program



At birth, 17% of babies are born stunted, however as time passes, more babies enter the stunted category.

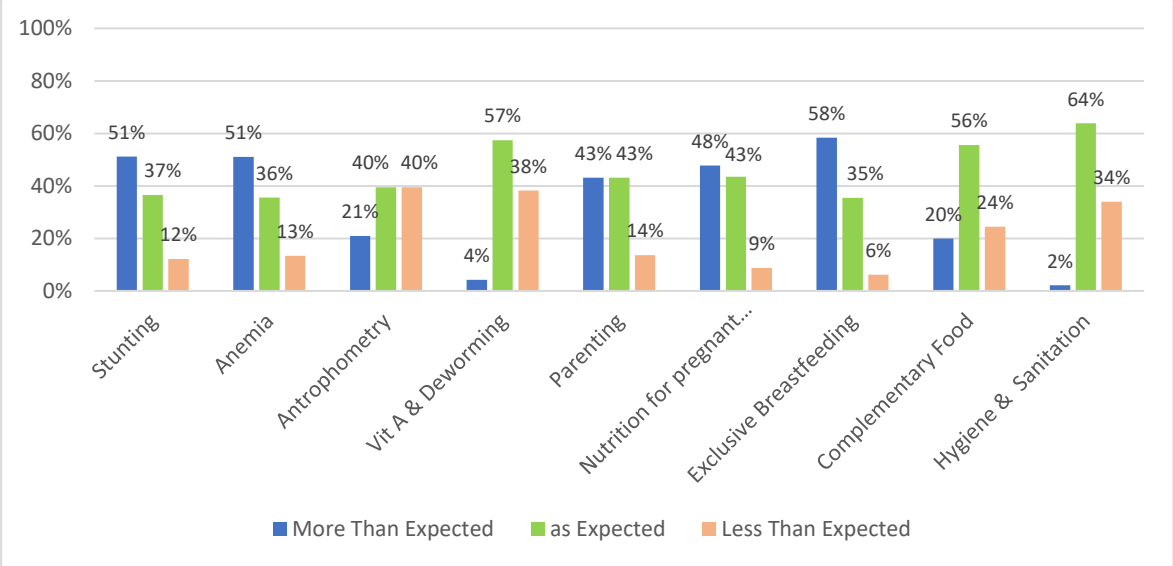
Besides collecting data on stunted children, during 11 months, our *kader* also collected the Mid-Upper Arm Circumference (MUAC) data of pregnant women who are participating in the program. The result showed that most of them are healthy but there is an average of 14,8% of the pregnant women in the group who were at risk of malnutrition. Based on our data from the food frequency questionnaire and observations, some of them have poor diets. In their daily intake they often consume low protein but high carbohydrate and fat, meanwhile during pregnancy they need more protein intake. Besides that, they also lack nutrition information from expert health educators.

Month	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Mid -Upper Arm Circumference (MUAC)											
Normal	75%	76%	81%	84%	85%	83%	87%	89%	92%	95%	91%
Malnutrition Risk	25%	24%	19%	16%	15%	17%	13%	11%	8%	5%	9%
Total of women	67	88	97	99	91	76	62	61	60	60	58

4. Strengthen the ability of volunteer health workers with interpersonal skill and training of trainer program

In the beginning of the stunting program, YUM held interpersonal skill training for the chosen women community leaders to improve their skills and knowledge. Based on research, Interpersonal skills training helps to improve communication within the team, which is essential when working with the *kader* in each *Posyandu*.

From March to December 2022, all of our *kader* received training to increase their knowledge and build their capacity. They also have to take on pre and post-tests during each training session. The result showed that 79% of the *kader* have either improved their pre-test scores higher than expected or as expected.



Every month our *kader* received different topics and the number of participants in the training always fluctuated. On average, around 90% of the kader regularly came to the training.

All of kader were very grateful that they were involved in the program. Besides receiving valuable information and skill, they also have more confidence to share information to their community.

5. Promoting awareness of stunting in 10 *Posyandu*

In the last few years, the government has already provided stunting information to the public, however unfortunately people's awareness about stunting is still low. To increase their awareness, YUM provided flipcharts to our volunteer health workers. Every month, using these flipcharts, they would deliver health information, including about stunting, to the community where they live, especially to mothers.

In general, most pregnant mothers in the area have only graduated from Junior high School and married at an early age, therefore their knowledge about stunting and how to care for their family is very limited.

For the second time, in September 2022, YUM collaborated with Kalbe Farma (pharmaceutical company) to hold free ultrasound for 60 pregnant mothers in Cipanas. During the activity, the

doctor delivered information about stunting and fetal development during 9-month pregnancy.

MEASURING QUANTITATIVE IMPACT

INDICATORS	TARGET	ACTUAL	BALANCE
POSYANDU	10	10	-
PREGNANT WOMEN	100	172	+72
BABIES		100	
VOLUNTEER HEALTH WORKERS	40 volunteer health workers 15 community leaders	49 volunteer health workers 15 community leaders	+9
FLIP CHARTS	30	30	
CAMPAIGN *Families*	1,500	2372	+872

Stories and Testimonials

Ibu DD, 33 years old, Community leader

"I was quite surprised and grateful at the same time when I was appointed to become one of the community leaders. Since I became a *kader*, I have participated in all the training that YUM provided. I personally feel I have grown as a person, especially through public speaking—I have become more confident when speaking to a larger audience. This has become an important part in my life, especially since my work as a community leader requires me to meet a lot of people and deliver information around stunting prevention, such as how to live a healthy lifestyle. My hope is that the program for community leaders and other volunteer health workers will continue because there are so many who are still untrained, and I hope that they too can increase their knowledge like me. Thank you for your continued generous support so that we can ensure more women are trained in stunting prevention!"

Ibu ND, 27 years old, Pregnant mother

I feel very lucky to have received support from the Stunting program. Every month I received a food package during my monthly health check and I was also asked to join the health education workshop, and got two free haemoglobin level checks. I joined the program when I was 4 months pregnant and continued receiving support up to 3 months after delivery. This was my second pregnancy and totally different, I felt healthier and my baby was born healthy. Thank you very much for the precious support.

Ibu SS, 34 years old, Pregnant women,

I had a great first impression when joining the stunting program. I received important health information, nutritional food packages and regular health checks. Unfortunately, my baby was born stunted. I felt awful but I never gave up and paid more attention in taking care of my son. Finally, when he was 3 months old, his nutritional status became normal and he is growing up to be a healthy baby. In April, he was 9 months old and his height was 74.3 cm. The knowledge and skill that I got from the program was very helpful and useful.