Editorial

Stunting: a multisectoral challenge and unfinished nutrition agenda

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It was great news that during the presidential election campaign, both the presidential and vice-presidential candidates addressed the stunting problem during the debate. It shows that stunting is regarded as a national priority nutrition problem. Stunting is part of a wider nutrition crisis in Indonesia: wasting, anemia and the double burden of malnutrition. According to the 2018 National Health Survey (RISKESDAS), 30.8 percent of Indonesian children under 5 years of age were stunted (almost 8 million children), 17.7 percent were underweight, 10.2 percent were wasted (low weight-for-height).⁽¹⁾ Although the prevalence of stunting declined significantly since 2013 (37.2%), the stunting rates remain unacceptably high. A child that is wasted faces double the risk of mortality associated with stunting. A child that is both stunted and wasted faces an even higher risk. Frequent episodes of wasting also increase the risk of stunting.

Stunted growth refers to low height for age, indicating that a child is short for his/her age. This reflects chronic malnutrition and carries long-term development risks. Stunting, with its associated impacts on child cognitive and physical development, occurs in the first 1,000 days of life and is largely irreversible. The first 1,000 days represent a life window when growth rates and neuroplasticity of the brain are at their peak and where nutritional deficiencies can exert their most devastating impacts. Poor maternal nutrition, indicated by low birth weight, is a strong predictor of stunting, and analysis of growth faltering in Indonesia shows that about 20 percent of children are considered stunted at birth. There is relatively little variation in growth faltering across regions, gender, and birth order. However, it is worse in rural areas, among the bottom 20 percent (income), and among less educated women.⁽¹⁾

Stunting has intergenerational effects. A child's risk of developing chronic malnutrition starts in the womb. Maternal short stature (less than 145 cm) is associated with an increased risk of underweight and stunted offspring. Poor maternal diet not only can lead to inadequate weight gain for mothers during pregnancy but it can impact the growth of the fetus. Nutrition needs are increased during pregnancy and dietary requirements are higher; it is estimated that a pregnant woman requires about 75,000 calories extra during pregnancy and an increased intake of micronutrients such as iron, zinc and calcium.⁽²⁾

It is estimated that today about eight million Indonesian children under the age of five are stunted. They are not growing well and are at high risk of becoming ill. They are less likely to benefit from education because their brain development has been compromised. And they are less likely to earn a good income and contribute to the overall economy. Lastly, they also are more likely to develop chronic disease such as diabetes and obesity in adulthood.

The UNICEF framework to tackle chronic malnutrition was started by UNICEF in 1990 and is used worldwide. The model has been

adapted $^{(3)}$ and it operates by dealing with the four main drivers of malnutrition through the following steps: (1) adequate access to care and age-appropriate feeding practices (C), (2) access to adequate health care services (H), (3) environmental health, hygiene, sanitation and access to safe water (E), and (4) access to a diversity of safe food (F) - CHEF.

In Indonesia, the absence or poor quality of all four CHEF drivers have contributed directly to the country's high rates of stunting. What is the context situation with Indonesia?

Firstly, food security can be patchy across the Indonesian archipelago. Adequate amounts of quality food are not always available, particularly to the poor in rural areas. Moreover, high prices of nutritious food such as fruits, vegetables and animal protein, make it difficult for poor families to purchase a diverse diet.

Secondly, access to adequate health services tends to be lower among poor and rural women, including pregnant women and mothers. Although women attend their antenatal visits regularly, the quality of the health services is not always optimal, resulting in low impact of such visits. For example, the availability of iron folic acid (IFA) supplements is very good (around 94% availability at Puskesmas level), but counselling on how to take IFA supplements and face the side-effects is often poor, resulting in low compliance. Of the 73.2% of pregnant women who received IFA supplements only 24% received ?90 IFA tablets, whereas the remaining 76% received ?90 tablets. Of the women receiving ≤ 90 IFA tablets, only 38.1% consumed all IFA tablets (≥ 90) and 48.9%suffered from anemia in pregnancy.⁽⁴⁾ Access to health services is also measured by immunization rates. Complete immunization among children 12-23 months decreased from 59.2% in 2013 to 57.9% in 2018.⁽⁴⁾ It remains below the Rencana Pembangunan Jangka Menengah Nasional (RPJMN) target of 93% in 2019.

Thirdly, feeding practices are also not always what they should be to ensure the healthy growth and development of children. The current rate of exclusive breastfeeding in infants was 37.3% in 2018.⁽⁴⁾ There remain many obstacles and constraints to exclusive breastfeeding practices, ranging from lack of enforcement of laws and regulations regarding marketing of breastmilk substitutes, insufficient attention to cultural barriers and more women entering the workforce without adequate baby-friendly policies in place. Complementary feeding practices are also important to prevent stunting. Many children are vulnerable to stunting after the age of 6 months. Children are not fed a diverse age-appropriate diet, nutritious food is not given and meals are given too infrequently.

Fourthly, poor sanitation, lack of access to safe water and unhygienic feeding practices also contribute to stunting. Children are very susceptible to infection such as diarrhea, resulting from unclean water and unhygienic behavior. Especially children at very young age, who start exploring their environments, still come too easily into contact with an unsafe environment and are at risk for becoming ill.

Research shows the importance of having adequate access to as many of the four nutrition drivers as possible. The probability that children between zero and three years of age will be stunted is lower when they have access to adequate levels of two of the CHEF drivers. In 2013, some 23% of children between zero and five years of age did not have access to adequate levels in any of the four nutrition drivers in Indonesia.⁽⁵⁾

Indonesia has been internationally recognized for its successful steps forward in public health nutrition. It was an early adopter of an universal salt iodization (USI) law and received the Helen Keller Award for significantly decreasing the prevalence of xeropthalmia in the past decades. In 1986, the Posyandu (health post) were officially established, as integrated community health posts in villages to improve maternal and child health with a focus on growth monitoring and promotion, nutrition, immunization and micronutrient distribution. Also, in the 1980s, the Sistim Kewaspadaan Pangan Gizi (SKPG) or Food and Nutrition Surveillance program was introduced. The SKPG monitored not only nutrition status in Posyandu, but also looked at climate, economic changes at all levels (national, provincial, district and sub-district). It raised alerts in multiple sectors to prevent severe malnutrition. However, past success has not yet translated into sustained success. Much more needed to be done - until recently.

There is a growing body of experiences in other developing countries that a "convergence approach" to tackle stunting can be effective, in which multisectoral interventions are coordinated to jointly target priority geographic areas and beneficiaries.⁽⁶⁾ Stunting reduction in Indonesia involves a multisectoral approach, including nutrition-specific interventions and nutritionsensitive interventions. Nutrition-specific interventions have been implemented mostly in the primary health care services for pregnant mothers, lactating mothers and children aged 0-23 months, adolescents and women of reproductive age, and children aged 24-59 months. Indonesia has a multitude of nutritionsensitive programs that have been proven to improve early childhood outcomes, including stunting. The ongoing nutrition-sensitive programs support stunting reduction, such as conditional cash transfer (Program Keluarga Harapan/PKH, Family Hope Program), national health insurance (JKN: Jaminan Kesehatan Nasional), non-cash food assistance (BPNT: Bantuan Pangan Non Tunai), water, sanitation and hygiene (WASH), early child education (ECED) - PAUD: Pendidikan Anak Usia Dini. There are still challenges for the quality of these nutritionsensitive intervention programs, which need to be improved and monitored intensively.

Inspired by the Peru's success to reduce stunting, Indonesian high-level officials from the Ministry of Health and the Ministry of Finance visited Peru and learned from the Peruvian example about how to accelerate stunting reduction. In August 2017, Vice President Jusuf Kalla launched the implementation of the National Strategy on Stunting (StraNas Stunting). This new National Strategy to Accelerate Stunting Prevention will ensure that all "1,000-day households"-those with pregnant women or children under two years of age can access the complete package of services essential to prevent stunting.⁽¹⁾

The StraNas Stunting involves 22 ministers and consists of five pillars that aim to raise public awareness of stunting, secure nationwide commitments to stunting reduction, and manage, implement, and converge the delivery of the priority nutrition interventions across three levels of government, which notably are (1) Pillar 1: national leadership and commitment; (2) Pillar 2: national public awareness campaign, (3) Pillar 3: national, regional, and community program convergence, coordination, and consolidation, (4) Pillar 4: nutritional food security and (5) Pillar 5: monitoring and evaluation.

The Stranas Stunting includes a very strong monitoring system with annual surveys measuring progress and reporting at annual summits. The projection of estimated outcomes will also allow better planning and budgeting, as well as underpinning national commitments to drive down rates of stunting. Indonesia is optimistic to be able to reduce stunting by more than 1% per year (as business as usual), because many factors support the Stranas Stunting such as high political commitment from our President and Vice President, formal regulation on the acceleration of stunting reduction (UU no 42/2014) and regulation of food (UU Pangan no 18/2012). Indonesia has joined the global scaling up nutrition (SUN) movement, and current supporting programs. Under Bappenas, the SUN movement has involved all stakeholders including business groups, civil society organizations (CSOs), UN/ donor and academia to move and actively support the stunting prevention programs.

As was hoped for, Indonesia has launched an ambitious stunting reduction strategy which aims not only to achieve national coverage by 2021 but also commits the country to implement all the key elements (nutrition-specific and nutrition-sensitive interventions) required for success. If Peru can do it, so can Indonesia!

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