



Editorial

## Stunting, risk factor, effect and prevention

Ragil Setiyabudi

Nursing Department, Health Science Faculty, Universitas Muhammadiyah Purwokerto, Purwokerto, Jawa Tengah, Indonesia

### ABSTRACT

Stunting still becomes a problem for Indonesian today. There are many risk factors which cause stunting, whether in short and long term effect. It can be overcome by a national nutrition awareness movement which involves multiple sectors which addresses to pregnant/childbirth women, toddlers, school-age children, teenagers and young adults and family empowerment.

### STUNTING

Stunting is a condition when a child has low length or height compared to their age. This condition is measured by length or height below minus two standard deviations from the median standard of child growth from WHO 2005<sup>1</sup>. The prevalence of stunting children in the world in 2000, 2005, 2010, 2015, and 2017 were 32.6%, 29.3%, 26.1%, 23.2%, 22.2%. Despite the decline, the government put stunting as a priority problem because of its serious impact. In 2017, more than half of stunting children in the world came from Asia (55%). Indonesia was included in the third country with the highest prevalence in the South East Asia Regional (SEAR). The average prevalence of stunting children in Indonesia in 2005-2017 was 36.4%. The incidence of stunting (short) under five is a major nutritional problem facing in Indonesia. Based on Nutritional Status Monitoring (PSG) data for 2015-2017, stunting has become the highest prevalence compared to other nutritional problems such as malnutrition, thinness and fat. The stunting prevalence of children had increased from 27.5% in 2016 to 29.6% in 2017<sup>2</sup>.

### RISK FACTOR

Stunting children is considered as chronic nutritional disorder caused by various factors including history of infectious diseases, health services, immunization status, exclusive breastfeeding, zinc and iron adequacy levels, maternal height <150 cm, maternal age, parent education level, mother's knowledge, family income, food availability in family, food diversity, sanitation, energy intake level, duration of infectious disease history, birth weight, birth

length, and genetics. From the above factors, the most dominant factors affecting stunting in children are exclusive breastfeeding and adequate nutrition during pregnancy and after child birth<sup>1,3-8</sup>.

### EFFECT

The short-term effects caused by stunting are an increase in the incidence of morbidity and death, reduced cognitive, motor and verbal capacity in children, and an increase in health costs. The long-term impacts are shorter stature as an adult, increased risk of obesity and other diseases, decreased reproductive health, lack of learning capacity and school performance, reduced productivity and work capacity<sup>2</sup>. Stunting may cause pain and death, suboptimal brain development so that motor development is delayed and stunted mental growth<sup>6</sup>. The effects of stunting include lack of child growth, lack of endurance, lack of intelligence, and low productivity<sup>9</sup>. Stunting children face a greater likelihood to grow into less educated, poor, unhealthy adults and more vulnerable to non-communicable diseases<sup>10</sup>.

### PREVENTION

Stunting prevention can be carried out through focusing on activities addressed to pregnant and childbirth women, children, school-age children, adolescents and young adults<sup>2</sup>. Children are necessary to consume various kinds of vegetables and fruits<sup>8</sup>, and routine monitor of their growth in *posyandu* (Integrated Service Post)<sup>11</sup>. At school age, it is carried out by examining worms and all age groups must behave cleanly and healthily<sup>12</sup>. Family empowerment by cultivating the yard as a source of family

<https://doi.org/10.30595/medisains.v17i2.5656>

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nutrition<sup>1</sup>, Scaling Up Nutrition (SUN) or the national nutrition awareness movement in the context of accelerating nutrition improvement in the first 1000 days of life, private and public sector collaboration in providing and accessing nutritious food can be solutions for stunting prevention<sup>13</sup>.

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