

Policy Trend of Stunting Treatment in Developing Countries at Southeast Asia (WHO's Role in Achieving Global Targets)

Tren Kebijakan Penanganan *Stunting* di Negara-Negara Berkembang di Asia Tenggara (Peran WHO untuk Mencapai Target Global)

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Abstrak: Stunting merupakan masalah gizi kronis akibat kurangnya asupan gizi sehingga mengakibatkan terganggunya pertumbuhan pada anak. Penelitian ini bertujuan untuk memetakan topik dan isu penelitian tentang tren penanganan stunting di negara-negara berkembang Asia Tenggara. Penelitian ini memberikan kontribusi pada perkembangan kajian kebijakan publik dan memberikan perbandingan kebijakan serta langkah-langkah yang diambil oleh pemerintah dengan angka stunting tinggi. Metode penelitian yang diterapkan pada penelitian ini adalah metode Systematic Literature Review (SLR) dengan menggunakan aplikasi Nvivo 20 dan Vosviewer sebagai alat analisis data. Artikel ini mereview 683 artikel yang bersumber dari database dimensions, selanjutnya dipilih sesuai dengan kriteria. Hasil penelitian mengungkapkan banyak tren penanganan stunting yang dilakukan negara berkembang di Asia Tenggara sesuai dengan kebutuhan dan kesanggupan negara. Kebijakan di Indonesia fokus pada peningkatan sanitasi yang layak, Malaysia memiliki program intervensi gizi dilakukan di setiap sekolah, pemerintah Myanmar memberikan perawatan khusus pada area pengungsian untuk meningkatkan keragaman makanan dan gizi yang cukup pada anak. Thailand sudah mencakup 20% pemenuhan kebutuhan pangan khususnya dalam protein hewani terutama untuk masyarakat miskin, Vietnam memiliki program intervensi gizi yang berupa pertanian dan ketahanan pangan. Penelitian ini penting dilakukan karena memberikan perbandingan kebijakan dan langkah-langkah yang diambil oleh negara-negara berkembang di Asia Tenggara khususnya yang memiliki angka stunting tinggi. Adanya perbedaan penanganan stunting yang dilakukan setiap negara dikarenakan kebutuhan dan kesanggupan negara masing-masing, namun dalam penanganan tersebut tetap sesuai dengan ketentuan dari WHO.

Kata Kunci: Stunting, Kebijakan, Negara Berkembang

Abstract : *Stunting is a chronic nutritional problem caused by a lack of nutritional intake resulting in impaired growth in children. This study aims to map research topics and issues regarding stunting management trends in developing Southeast Asian countries. This research contributes to the development of public policy studies and provides a comparison of policies and measures taken by governments with high stunting rates. The research method applied in this study is the Systematic Literature Review (SLR) method using the Nvivo 20 and Vosviewer application as a data analysis tool. This article reviews 683 articles sourced from the dimensions database, then selected according to the criteria. The results of the research reveal that there are many trends in stunting management carried out by developing countries in Southeast Asia in accordance with the needs and capabilities of the country. Policies in Indonesia focus on improving proper sanitation, Malaysia has a nutrition intervention program carried out in every school, the Myanmar government provides special care in refugee areas to increase food diversity and adequate nutrition for children. Thailand already covers 20% of meeting food needs, especially in animal protein, especially for the poor, Vietnam has a nutrition intervention program in the form of agriculture and food security. This research is important because it provides a comparison of policies and steps taken by developing countries in Southeast Asia, especially those with high stunting rates. There are differences in the handling of stunting in each country due to the needs and capabilities of each country, but in handling it remains in accordance with the provisions of WHO.*

Keywords: *Stunting, Policy, Developing Countries*

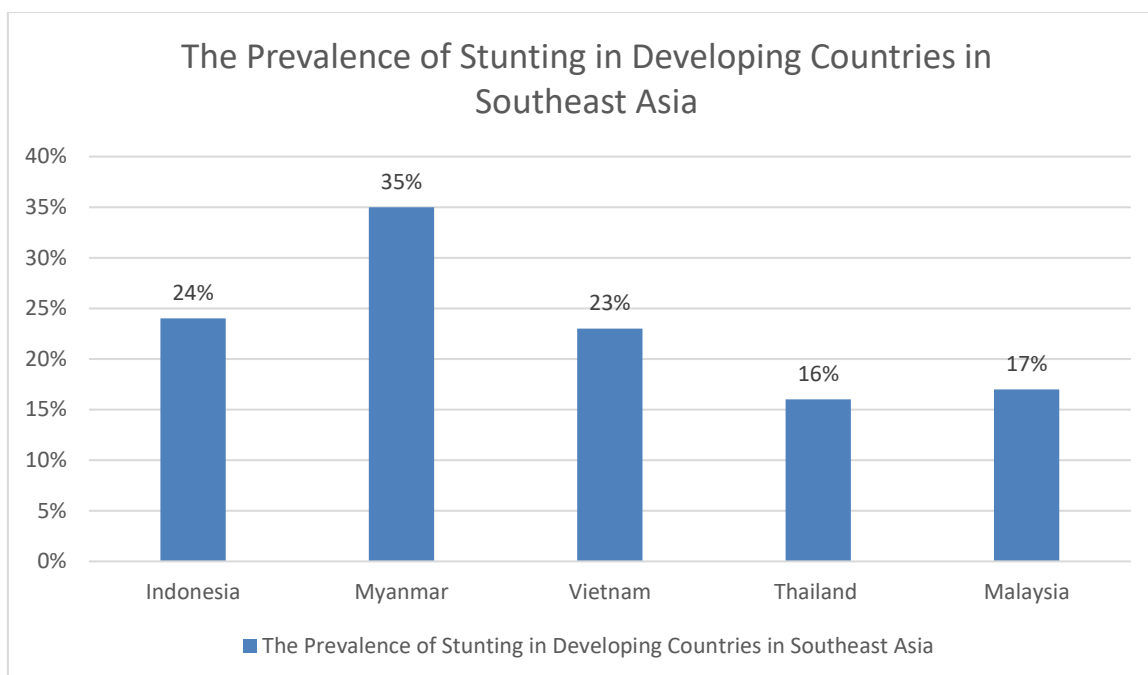
Introduction

Child health be one gauge measuring something nation in measure success government for prepare generation nation so that needed supervision to use fulfil need nutrition for children develop with mother role urgent in support effort enhancement nutrition, especially in Thing intake nutrition family, from preparation food and selection food on the menu (Apriluana & Fikawati, 2018). Malnutrition resulted something nutritional status conditions no good in period time short or period time long. Impact from intake poor nutrition, either from facet quality nor quantity, height pain, or is combination from both . Condition the often found in countries with condition economy not enough (Sutarto, 2018). Children in rural areas more short than in urban areas, however children population original rural in a manner significant more not enough good than another group (Gatica-Domínguez et al., 2019). Inequality social economy could influence even distribution nutrition causes stunting rates follow increase. Stunting can occurs in 1000 days first life child after fertilization and exacerbated with recurrent and chronic disease. Globally, 150 million child toddler experiencing stunting in 2017, where more from half (55%) are Asian though lack nutrition decrease globally, stunting is declining relatively more slow, threatening achievement commitment international (Angdembe et al., 2019a).

According to Apriluana & Fikawati, (2018), *stunting* is disturbance growth physical be marked with decline acceleration in growth and is impact from no balance nutrition. Stunting is formed by *growth faltering* (delay weight gain) and *catch-up growth* (grow chase) which is not sufficient to reflect inability for reach optimal growth, the disclose that group newborn toddler with normal weight can experiencing stunting when fulfillment need next no fulfilled with good (Kesehatan et al., 2020a). *Stunt* own impact period long form the disturbance development physical, mental, intellectual, to cognitive. Stunting is affected by many factors, including social economy, intake diet, infection, nutritional status mother, illness infection, deficiency micronutrients, environment and disorders metabolism physical (Agushybana et al., 2022). Stunts have dire consequences for health kids on term short could lower ability cognitive, motor, and verbal, improvement morbidity even mortality consequence infection increases risk perinatal and neonatal mortality, increasing risk disease chronic in adulthood, and development bad boy (Wali et al., 2019).

Detection of *stunting* must be conducted during adolescence, preconception, pregnancy, and postpartum for up to two years. Collaboration strong multisectoral and systemic are needed to reduce stunting fast and effectively (Agushybana et al., 2022). The government's role is urgent in reducing inequality in society (Ranggi Ade Febrian, 2017). Inequality in education and health is urgent in a manner intrinsic, so it tends to be inherited by the next generation. Inequality, at least part, originates from obstacles to investment in human capital, which prevents the development of complete talent in individuals and limits growth as a whole (Flabbi & Gatti, 2018). A strategic move in the prevention of stunting is necessary; one that has been carried out by the relevant Indonesian government lower factor risk is intervention nutrition form step intervention nutrition-sensitive and interventionist nutrition Specific (Saputri & Tumangger, 2019).

According to WHO, in 2016, the prevalence of stunting toddlers in the world increased by 22.9%, and conditions nutrition toddler short Becomes cause 2.2 million from whole reason death toddlers around the world. Not only system health arrange fertility as well as increase health Mother however outside factors scope authority health as well as system gift care sort of distribution riches based asset as well as learning function in ensure inequality (Angdembe et al., 2019b). In 2017, 55% of stunted toddlers in the world came from Asia and 39% came from Africa. Of 83.6 million stunting toddlers in Asia, 58.7% come from South Asia and 0.9% originate from Central Asia (0.9%) (Indonesian Ministry of Health, 2018).



Source: (Adara Relief International, 2023)

Based on the data that written (Adara Relief International,2023) written that number stunting emergency in Southeast Asia still there are countries that are numbers prevalence not yet meet the tolerance limit number *stunting* according to WHO is 20% per country. The data showing that treatment and prevention *stunting* still less, if handling *stunting* no handled with appropriate then it's huge possibility could causing obstruction growth economy, increase poverty, and widen inequality. Proof International show that stunting can be hinder growth economy and lower labor market productivity, so resulted loss of 11% of GDP (Gross Domestic Products) as well reduce income worker mature up to 20%.

Result of study (Kohli et al., 2020) say that various factor explained that 66% of the change in stunting between 2006 and 2016 was in the form of home asset repairs stairs, as well mobilization Public contribute to improving health, poverty, and sanitation programs. According to (Shekar,2017) achieving the stunting target conducted but need investment coordinated size in *Key Intervention Package for Stunting* (KIPS) and the environment supportive supporters. Besides factor Externally, internal factors also need to be considered for reduce stunting rates and achieve global targets. (Agushybana,2022) show that a number of practice training stunting prevention for Mother age young and aspiring bride walk so that study this urgent conducted to use for give contribution to development knowledge rule and know trend handling stunting from 2017-2022 through WHO role in encourage developing countries in the world especially in Asia to achieve the WHO global target of 2030. Because globally, stunting is decreasing about 1.8% per year or only will reduced by 18% in 10 years to front, results this still far from the target set by the World Health Assembly. In study use method study literature review or study literature.

Methods

This study uses a qualitative approach to collect and explain data. This study use method literature review or study literature that is one search and research literature with read various books, journals, and other related publications with topic research, for produce one related article with one topic or issue certain (Apriluana & Fikawati, 2018). Method literature review with results collection article from the Dimensions website which totaled 683 articles and carried out analysis using Nvivo 20 and Vosviewer. Enter the year limit and keyword selection article. This research specifically in Indonesia, Myanmar, Vietnam, Thailand, and Malaysia. Collected articles based

on criteria for the economic trend of developing countries in those countries based on *stunting* data 2017-2022 years. Keywords used in study this that is *stunting*, policy, developing countries.

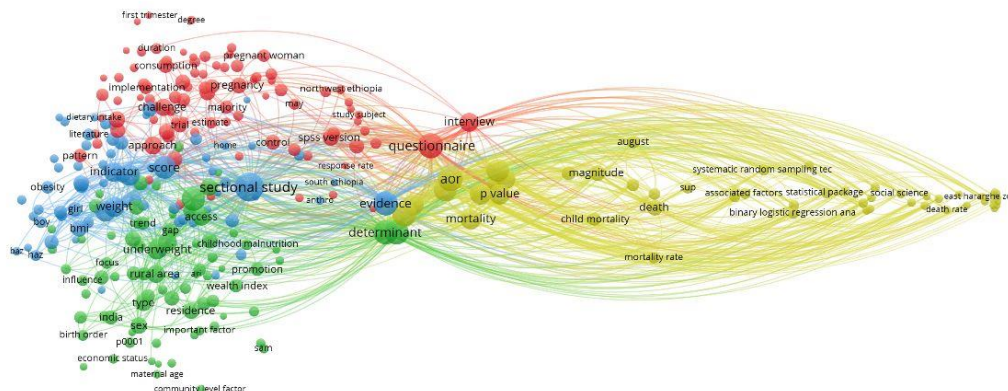
Results and Discussion

This section will explain the policies that have been implemented by WHO so far and how the stunting rate has been in several recent periods. Next, it will explain the respective policies of 5 countries in Southeast Asia regarding the focus on handling stunting.

Policy Handling WHO *stunts*

Data set about *stunting* contains 997 data sources from 157 countries and territories, with almost 80% children live in countries with at least one data points on stunting, wasting and excess aged weight not enough of five years. Number of countries with very high prevalence of stunting has decrease half since in 2000, from 67 countries to 33 countries with percentage children under 5 years who are stunted. Prevalence of child stunting man more tall than child woman from in 1985 and 1995, however more low from child woman for 15 years final (Song et al., 2019). Because that's an increase stunting prevalence seen in newborns during year first pandemic before known to all population toddler used for monitor indicator this (UNICEF/ WHO/ Grup Bank Dunia, 2021).

Stunting is affected by many factors, including social economy, intake diet, infection, nutritional status mother, illness infection, deficiency micronutrients, environment and disorders metabolism physical (Agushybana et al., 2022). Nutrition bad is impact from state of nutritional status (Sutarto, 2018). History of nutritional status mother and history disease will influence growth fetus, causing IUGR (intrauterine growth retardation) and affecting babies being born, like potential baby weight and length experience disturbance nutrition and health in period age next (Kusumawardani et al., 2020). For reason this, the prevalence of stunting is indicator important health and nutritional status something population, and stunting prevention is a very important goals, for example the Scaling Up Nutrition (SUN) movement (Martin W. Bloem, 2013). The image below is literature data from a search result on Dimensions about the causes of stunting in developing countries in Asia. The factors that cause stunting can be seen in Figure 1:



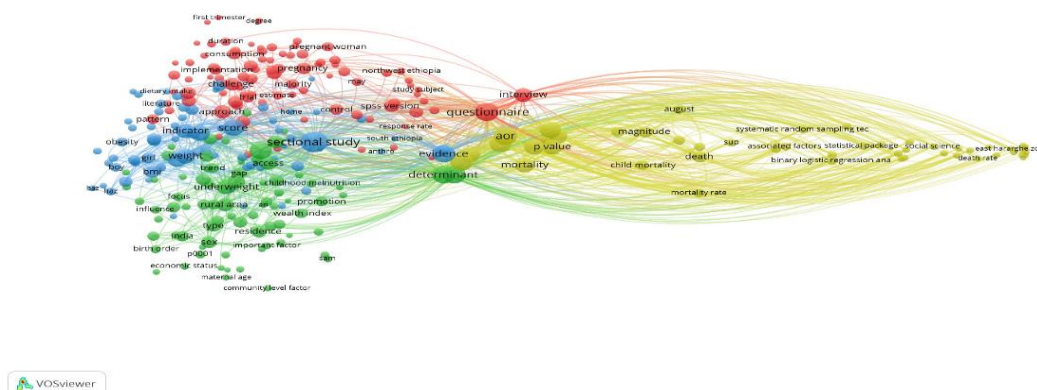


Figure 1: factors that cause stunting

Stunts that occur if no offset with grow catch -up growth resulting decreased growth, the problem of stunting is problem health related communities with enhancement risk morbidity, mortality and disability growth motor and mental. So that needed approach multisectoral for lower prevalence of stunting, with focus on monitoring grow flower child, education nutrition and resistance food house ladder (Dukhi et al., 2017) . The prevalence of wasting in a number of context could folded double Among season postharvest (often associated with availability more food height and pattern inclined weather no causing disease) and season preharvest (often associated with lack food, weight rain and disease related that can affect nutritional status) (UNICEF/ WHO / World Bank Group, 2021). Focus on growth boosting economy income Public poorest and with thus, increase the quality and equity of intermediary inputs is effective way for ensure that growth economy leads to a decline level *stunting* child (Seema Nasser et al., 2022).

Government and partners development work in the field health need change understanding about stunting. This could conducted with do promotion health about what it's stunting, factor risk of stunting, impact of stunting on health child moment this and in period long. Implementation of the stunting prevention program is expected could involve whole society, incl youth, parents and cadres health (Yasa et al., 2021). Besides that, power health plays a very important role in preventing and managing stunting. Prevention and treatment of stunting can conducted with education good nutrition to youth, parents, cadres health. Knowledge and awareness are needed for fulfillment nutrition when baby is at in heavy content born baby fulfilled.

Government need make quick and practical policies for support creation empowering environment Public in prevention *stunting*. Empowerment Public in implementation of an intervention program consisting of from government as initiator, facilitator and motivator implementation of sharpening, building and building programs that have role as partners developer (Suluh et al., 2022). Successful intervention be marked with combination commitment politics, multi -sectoral collaboration, engagement community, a giving platform service based communities, and more program coverage and compliance broad (Sudirman & Saidin, 2022). Effective policies need made for increase nutrition mothering, breastfeeding, and promoting maintenance for consumption and improve nutritional status kids. Effective policies need made for increase nutrition mothering, breastfeeding, and promoting maintenance for consumption and improve nutritional status child (Marni et al., 2022).

Stunting prevalence

Spread prevalence of stunting for each country with model estimates are presented for year 2021, percentage stunted children under 5 years, <2.5% (very low) 2.5 – <10% (low) 10 – <20%

(medium) 20 – <30% (high) ≥30 % (very high). According to WHO, a child categorized as stunting if long or tall body no more from -2 SD (default deviation) of normal height for his age. Generally, child with stunting will experience developmental problems cognitive and motor skills, which will influence productivity moment mature later. Besides that, son with stunting prone to various disease (Ministry of Health RI, 2018). Required approach multisectoral for lower prevalence of stunting, with focus on monitoring grow flower child, education nutrition and resistance food house ladder (Dukhi et al., 2017). The Prevalensi Stunting can be seen in Figure 2;

	Boys						Girls					
	1985	1995	2000	2005	2010	2014	1985	1995	2000	2005	2010	2014
Urban location												
7-9	25664	12344	13507	14734	13435	13415	25678	12364	13513	14604	13438	13451
10-12	25665	13170	13591	14868	13463	13446	25655	13201	13631	14558	13463	13439
13-15	25669	13196	13612	14743	13463	13454	25673	13170	13516	14712	13462	13469
16-18	25412	13065	13160	14336	13409	13163	25253	13163	13062	14106	13371	13172
7-18	102410	51775	53870	58681	53770	53478	102259	51898	53722	57980	53734	53531
Rural location												
7-9	25656	12191	13551	14399	13449	13403	25653	12198	13445	14249	13479	13392
10-12	25666	13021	13479	14568	13451	13460	25663	12784	13461	14398	13479	13414
13-15	25670	13022	13239	14460	13474	13466	25671	12543	13392	14469	13458	13468
16-18	25638	12985	13065	14482	13431	13160	25550	12337	13057	14322	13459	13118
7-18	102630	51219	53334	57909	53805	53489	102537	49862	53355	57438	53875	53392
Total												
7-9	51320	24535	27058	29133	26884	26818	51331	24562	26958	28853	26917	26843
10-12	51331	26191	27070	29436	26914	26906	51318	25985	27092	28956	26942	26853
13-15	51339	26218	26851	29203	26937	26920	51344	25713	26908	29181	26920	26937
16-18	51050	26050	26225	28818	26840	26323	50803	25500	26119	28428	26830	26290
7-18	205040	102994	107204	116590	107575	106967	204796	101760	107077	115418	107609	106923

Figure 2 represents stunting prevalence to be problem biggest for developing countries. The stunting rate soared caused by many factors, internal and external external, if number *stunting* the more soared so happening barriers in developing countries no could avoided. The economy will too faltered if prevalence *stunting* Keep going growing, the economy faltered will resulted obstruction fulfillment nutrition in children resulting *stunting* prolonged.

In the Sustainable Development Goals (SDG), the indicators used is prevalence of stunting, and its target, based on Resolution The World Health Assembly adopted 65.6 in 2012, lowering prevalence of child stunting as big four twenty percent (40%) by 2025 (Herrin et al., 2018). Indicator targets nutrition bad 2030 children defined by WHO in reduce total up to 50% of children under 5 years experience stunting. nutritional status someone in the past depending on variety mutual factors relate to, and with thus, determine the cause of stunting is complex (Sophie Budge, 2019). The nutritional status of adults is greatly influenced by experience nutrition them in childhood (Nandar Aung, 2022). Mother's education could associated with a number of that thing positive could influence nutrition child, incl potency income, age more marriage old and pregnant first and because that heavy born more child high, empowerment and power bid in family for source power and prioritize nutrition child. and health, as well knowledge and talent for Act based on information related new with nutrition and health (Martin W. Bloem, 2013).

Smith and Haddad used a regression model country level for evaluate impact availability food (measured as the average kilocalorie daily consumed per capita), diversity food (measured as % of total diet of non-staple food), education women (measured as woman level participation school medium) and health and empowerment female (measured as ratio hope life female to male) on country level stunting prevalence (Shekar et al., 2017). Death child below 5 years old in Southeast Asian countries in 1990 and 2011 Brunei Cambodia Indonesia Lao PDR Malaysia

Myanmar Philippines Singapore Thailand Vietnam Death /1,000 births life Prevalence (%) (Martin W. Bloem, 2013). nutritional status somebody during one thousand day first depending on variety mutual factors relate to, and with thus, determine the cause of stunting is complex thing (Budge et al., 2019).

Through the Micronutrient Program, DOH implements four sets of interventions for resolve deficiency micronutrients : (1) supplementation micronutrients supply of vitamins and minerals to treatment or prevention deficiency micronutrients certain ; fortification food addition micronutrients essential for product lots of food consumed ; (3) increasing the diet/ adoption diet diversification practice proper food and nutrition through education nutrition production and consumption food ; and (4) monitoring and promotion educational growth strategy for promote health child, development people and quality life through measurement sequentially growth physique and development individual in society (Herrin et al., 2018).

Handling in Developing Countries

In developing countries many factor causes of stunting include lack of exclusive breastfeeding, social economics, birth weight low birth weight (LBW), birth premature, low level parental education and disease infectious (Fitrotuzzaqiyah & Rahayu, 2022). According to WHO in 2016, prevalence stunting toddlers in the world by 22.9% and conditions nutrition toddler short Becomes cause 2.2 million from whole reason death toddlers around the world. Almost half level deaths in children under five years in Asia and Africa are due to deficiency nutrition. This causing death three million child per year (Apriluana & Fikawati, 2018). So that needed appropriate handling in countries that have the stunting rate is high, so that the stunting rate is up death toddler could decreased.



Figure 3 describes, still there are developing countries that have number *stunting* high. *Stunt* rate no will decrease if no exists appropriate treatment in each country. Because every country has problem different *stunting* so every country has different handling. Handling *stunting* every country can different corresponding with circumstances and conditions of the country, however must permanent refers to the guidelines that have been determined by WHO. Guidelines handling *stunting* that has published by WHO in reach the global target of 2030, must implemented by all countries both developed countries as well as developing countries.

Look the dangers posed by stunting, the Government of Indonesia is committed for overcoming and lowering the prevalence of stunting is discussed through meeting limited about intervention *stunting* held together chairman national team (Kesehatan et al., 2020). In 2017, it happened meetings held by ministries / agencies for discuss necessity strengthening coordination and expansion program coverage, for increase internal program quality framework reduce stunting (Kesehatan et al., 2020). Factor sanitation bad environment that is not adequate, including clean water use facility latrines that do not healthy, as well behavior wash Bad hands contribute a

lot to diseases infection. Condition the will causing disturbance linear growth as well could increase death in toddlers (Khotimatun Nisa et al., 2021).

Proper sanitation need obtained by all society in Indonesia, with exists proper sanitation will slow down the occurrence of stunting in toddlers, where with clean water, no will there is disease infection that causes disturbance growth in children toddler. However, in reality what happened distribution of clean water worth not equally resulted only Public with economy medium up to get clean water feasibility (Kidul et al., 2017). Thus an economic society his low is very difficult for get decent clean water, so children experienced toddler poverty generally often experiencing stunting compared child condition toddler economy his tall (Khotimatun Nisa et al., 2021).

In Malaysia, several programs intervened nutrition has conducted Among child 8 years old, youth and children with problem excess body weight and obesity, who reported intervention program effectiveness education nutrition in increase knowledge, attitude and practice about nutrition. One of them is the Nutrition Program School (SNP) is a primary prevention program that promotes style life healthy in between children school base remember height prevalence malnutrition in Malaysian children (Angeles-Agdeppa et al., 2021). Promotion education nutrition needed in schools and Food Programs School must held at least in three school by 2020 and at least Keep going increase by 2025 in every state in Malaysia (Teo et al., 2019). Studies previously report that children school Malaysia's base on the increase risk poor dieting behavior, incl skip breakfast, intake low fruits and vegetables, behavior snacking that isn't healthy and active low physique, which can affect nutritional status them and create children lack nutrition, performance more cognitive low and quality bad life (Teo et al., 2019).

Kayin State in Myanmar, which is above score health threshold WHO community for stunting, require action immediately. Besides that is, food protein tall no consumed and some big child no fulfil minimum recommended dietary diversity. Government regions and non governmental organizations involved in give care for those in the camps shelter must give effort special for increase diversity diet and nutritional status kids. Nutrition education to moms about correct IYCF practices and productivity more farming tall work same with respective religious leaders are highly recommended (Hein et al., 2019).

The low consumption food nutritious is sign that access to food still hard. Become notes urgent for government that access food is factor key in build a free country from stunting problem. Because that's an increase ability Public for access ingredients food especially for poor people have to Becomes priority government for a solution stunting cases can quick happened. In Thailand itself already sufficient 20% fulfillment need food specifically in animal protein (Djamil, n.d., 2020).

Inner Vietnam handle stunting cases using intervention programs form of nutrition agriculture and resilience food, network security social, development child age early childhood, maternal mental health, empowerment women, protection children, schools, water, sanitation and hygiene, health and services family plan. This program proven lower the average annual rate of reduction (AARR) or the average decrease annual for stunting up to 4.5% (Rina Tri Handayani, 2020). The main result is change prevalence of stunting, which was estimated as the average rate decline annual (AARR) (Hossain et al., 2017).

Conclusion

Stunting is formed by growth faltering (delay weight gain) and catch-up growth (grow chase) which is not sufficient to reflect inability for reach optimal growth the disclose that group newborn toddler with normal weight can experiencing stunting when fulfillment need next no fulfilled. This study found that the five countries in Southeast Asia that have high stunting rates have carried out adequate treatment. That the five countries in Southeast Asia have almost the same policies in dealing with stunting, namely in fulfilling nutrition. Such as meeting the

nutritional needs of the poor, fulfilling animal protein for the residents. However, there is a slight difference in handling in Indonesia because they have a sanitation program for slums. That the policies of the five countries have met the standards of WHO.

This research contributes to the development of public policy studies, especially regarding the handling of stunting. This research is also important because it provides a comparison of policies and steps taken by developing countries in Southeast Asia which have high stunting rates. The findings of this study provide policy recommendations for the government in making new policies. The issue of handling stunting in developing countries is very interesting to be used as research material because the United Nations has a target of being free from stunting worldwide in 2030.

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