

Strategies for Handling Stunting Risk in Indonesia (Case Study in Kupang City, Nusa Tenggara Timur Province, Indonesia)

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Abstract: Stunting prevalence in Kupang City is in the acute and chronic category. This condition is caused by mothers and toddlers experiencing prolonged quality nutritional deficiencies due to failed parenting patterns, knowledge of housewives who are still low, clean and healthy lifestyle that is not optimal, and Posyandu and Puskesmas interventions as maternal and toddlers health services are not optimal. The results of the SWOT analysis indicate that the handling of stunting risks in the Kupang City can be done in several ways, namely: (1) returning the function of the Posyandu and increasing the participation of households visiting the Posyandu; (2) increasing counseling to strengthen the knowledge capacity of mothers and households; (3) strengthening human resources of health actors in the Puskesmas in the setting of nutrition needs, nutrition management and management of the mother to maintain the health of the family and themselves; (4) access to roads and health infrastructure is made adequate; and (5) enhancing cross-sector coordination and cooperation and partnerships with private and business communities through the Model Village in mobilizing resources for food supply at the household level so that consumptive behavior changes into nutrient-conscious behavior, increased family purchasing power, and changes from parenting housewife.

Keywords: prevalence of stunting, mother and toddlers, Kupang City

1. Introduction

Stunting is a term for body of dwarf and/or short to describe the condition of chronic malnutrition in children aged 0-59 months with conditions of weight and body length against age are below minus 2 standard deviations (<-2) based on median standard from the World Health Organization (WHO). Stunting in the short term causes an increase in morbidity and mortality, a chronic decrease in cognitive-motoric-verbal abilities, and an increase in health costs. While in the long term, stunting causes a short body posture unlike normal growth in general, increases the risk of obesity and other diseases (hypertension, diabetes, cancer, etc.), decrease reproductive ability, the achievement of the intellectual ability is less than optimal when at school, and work productivity is not optimal.

Data Ministry Health in Indonesia in 2018 reported that Indonesia was in a stunting emergency, and estimated 37,2% (\pm 9 million) of children aged 0-59 months in stunting conditions which continued until school age 6-18 years, and an estimated 70s million residents aged \geq 18 years (adults) show an increasing trend of sufferer from Non-Communicable Diseases (PTM). Children with stunting conditions when they grow up tend to be obese and have the potential to suffer from PTM such as hypertension, diabetes, cancer, etc., (Atmarita 2018).

The Indonesian Government has set stunting as a priority program since 2016 through the Minister of Health Regulation No. 39 of 2016 concerning Guidelines for Implementing a Healthy Indonesia Program with a Family Approach which is expected to reduce stunting by 40% on 2025, and achieve the Sustainable Development Goals (SDGs) and the Government of Indonesia's Second Sustainable Development Goals, namely eliminating hunger and all forms of malnutrition until 2030 and achieving food security. Government policy to reduce stunting by conducting policy interventions for pregnant and maternity mothers, toddlers, school-age children, adolescents, and young adults.

Indonesia include category acutely and chronic stunting because its resident shows a trend of energy and protein deficite prolonged in accordance the National Individual Food Consumption Survey (SKMI), where most pregnant women (cities and villages) and socio-economic (quintile 1-5) residents have problems with food nutrition. Meanwhile, 31,3% of pregnant women in Indonesia tend to be short (<150 cm) so that genetically tend

to contribute to 4,3% of infants born experiencing undernourished (weight <2500 grams and body length <48 cm) spread varied from the lowest in Maluku (0,8%) to the highest in Papua (7,6%) (Zahraini 2018).

Nusa Tenggara Timur Province (NTT) is one of the autonomous regions in Indonesia with a high stunting prevalence (40,3%) compared to other provinces, and higher than the national average stunting prevalence (29,6%). This condition is affected by infants born with a very short category of 18,0% and born short at 22,3% (RI Ministry of Health 2018). The Kupang City has the potential to be the highest stunting contributor in NTT according to information stating that the incidence of stunting in Kota Kupang shows a downward trend only at an average of 1,8% per year, and the current condition of stunting in Kupang City has reached 2000 children (Inews.id 2018). Based on this information, it is necessary to conduct a scientific study to identify potential risk factors for stunting in Kupang City, and strategies for handling the risk of stunting.

2. Methods

This research was conducted using the secondary data method related to nutritional problems, growth and outcomings related to stunting risk which were studied from various literature and the results of previous studies compiled from various documents and health reports adequate. Information related to the secondary data research was obtained from related sectors including reports from the East Nusa Tenggara Statistics and Kupang City Statistics, the Health Office, and the Ministry of Health. Global policies related to nutrition are obtained by downloading from world sites (WHO, UNICEF, etc.) through internet technology. The formulation of the handling strategy is carried out using the SWOT method (Strength, Weakness, Opportunity, Threat). The drafting of the research was carried out with the research team through various discussions, presentations, consultations with experts. The results of the research were then presented and discussed through open seminars at the Jeriko Center Kupang Foundation by involving discussants from the Kupang City Government (Mayor, Health Office, Chair of TP.PKK), Posyandu cadres, academics, and organizations dealing with nutrition problems. Round Table Discussion (RTD) is conducted to present the results of the study and get views from stakeholders and experts regarding solutions and recommendations that might be developed for future planning.

3. Result and Discussion

Prevalence is the proportion of a particular object from the total object observed or found in each survey or observation. The results of Nutritional Status Monitoring (HPSG) in Kupang City reported that infants born in stunting were 36,4% and wasting was 21,0% (Table 1). This shows that Kupang City is categorized in acute and chronic nutrition problems. The World Health Organization states that a region is categorized as an acute and chronic nutritional problem if the prevalence of stunting is $\geq 20\%$ and the prevalence of wasting is $\geq 5\%$.

Infants born with low birth weight / BBLR (<2500 grams) and / or birth bodies length of less / PBLK (<48 cm) are more susceptible to stunting. The stunting prevalence in Kupang City is estimated to tend to increase because infants born with underweight nutritional status are still very high (33,7%), the prevalence of BBLR infants reached 3.64% of total live births with morbidity rates of 18.92% which caused a decrease in the prevalence of stunting an average of 1.8% per year. Ni'mah and Nadhiroh (2015) stated that infants born with low birth weight conditions had a stunting risk of 4,47 times greater than infants with normal birth weight (> 2500 grams). Likewise infants born with PBLK conditions are at risk of experiencing stunting 4,091 times greater than infants with normal birth length (> 48 cm). The NTT Health Office (2017) states that BBLR is one of the main factors affecting perinatal and neonatal deaths. While babies with low birth weight status affect about 20% of stunting (Atmarita 2018).

Table 1. Prevalence of toddlers nutritional status in Kupang City

No.	Variables	Total
1.	Prevalence nutritional status of toddlers	
	Underweight (%)	33,7
	Stunting (%)	36,4
	Wasting (%)	21,0
	Fat (%)	2,0
	Normal (%)	6,9
	Total	100,00
2	Prevalence BBLR	
	Infants born alive (person)	8,499
	BBLRsufferers (person)	296
	BBLR (%)	3,64

3.	Prevalence of toddlers morbidity (case)	
	BBLR (7)	18,92
	Diarrhea (5)	13,51
	Sepsis (5)	13,51
	Fever spasms (4)	10,81
	Asfiksia (3)	8,11
	Aspirasi (3)	8,11
	Respiratory failure (2)	5,41
	Congenital abnormalities (2)	5,41
	Anansefalus (1)	2,70
	Bronko Pneumonia (1)	2,70
	Infection (1)	2,70
	Heart abnormalities (1)	2,70
	BBLSR (1)	2,70
	Breathless (1)	2,70
	Total	100,00
4.	Prevalence of toddlersmortality (case)	
	Neonatal (23)	19,33
	Infants(37)	31,09
	Toddlers kids (11)	9,24
	Toddlers (48)	40,34
	Total	100,00
5	The average decrease in stunting incidence per year (%)	1,8

Source: BPS (2019), PSG Kemenkes RI (2018), Profile of Kupang City Health (2018), processed

Toddlers born with BBLR and PBLK conditions are caused by growth faltering in infants in the pre and post conception period so that infants are born with Intrauterine Growth Retardation / IUGR conditions (infants born enough months but less in weight and length) and infants born with prematurity conditions (womb age less than 259 days) (Ni'mah and Nadhiroh 2015; Health Office NTT 2017). Growth falters are strongly influenced by pre-conception mothers who experience poor nutritional status, anemia, malaria, and sexually transmitted diseases (STDs), and the age of pregnant women is too young (<20 years) (Health Office NTT 2017).

It is estimated that growth falter in pregnant mothers and infants tends to increase along with an increase in stunting cases in Kupang City due to prolonged nutritional deficiencies (Table 2). This condition is caused by the macronutrient intake of existing conditions that have not met the ideal macronutrient consumption. Riwukore and Habaora (2019^a) state that the average ideal calorie consumption is 2000 calories per day per person. Calories are the synthesis of carbohydrate, fat and protein macronutrients. Protein is a macronutrient that is very important in the growth and development of the body so that high protein intake is needed. The ideal consumption of protein for children, adolescents and adults is 1.5; 1.0; and 1.8 grams of protein / kilogram body weight / day (Riwukore and Habaora 2018^a).

Table 2. Consumption of food ingredients in households (families)

No.	Consumption Variables	Ideal Consumption	Consumption	Deficiency
			Existing (day)	
1.	Carbohydrate	325 gram	146,9 gram	178,1
2.	Protein	75 gram	52,15 gram	22,85
3.	Fat	44 gram	18,20 gram	25,80
4.	Vitamin		5,09 % resident	
5.	Water	1-2 litter	1,5 litter	-

Source: BPS (2019), processed

Chronic deficiencies of essential nutrients in households (families) are strongly influenced by socio-economic conditions such as daily living patterns and household income (Table 3). The lifestyle of households in the Kupang City is still consumptive (60,37%) accompanied by some households having poor sanitation and food security (42,85%) so that the ability to meet nutrient intake in households is limited and creates the risk of disease.

Table 3. Socio-economic conditions of households

No.	Variables	Quantity	
		Total	%
1	Income		
	≥ Provincial minimum wage (UMP)	≥ IDR.1.793.298/month	9,85
	<Provincial minimum wage (UMP)	< IDR. 1.793.298/month	90,15
2	Expenditure		
	Foodstuff	< Rp396.771/month	39,63
	Not foodstuff	> Rp396.771/month	60,37
3	Labour	131.102 people	100
	Laborforce (employed and unemployed)	22.442 people	17,12
	Unlaborforce	108.660 people	82,88
4	Population	412.708 souls	
	Population not yet prosperous	165.991 souls	40,22
	Population above the poverty line	246.717 souls	59,78
5	Households		
	Number of households	97.725households	-
	Number of households members	4,22 people	-
	Number of Households Monitored Clean and Healthy Lifestyle (PHBS)	5.951 households	6,08
	Households PHBS	2.550 households	42,85

Source: BPS Kupang City(2019), BPS NTT (2019), Profile of Kupang City Health (2018), processed

Poor of sanitation and food security can increase the risk of infectious diseases, such as diarrhea and worms, which interfere with the absorption of nutrients in the digestive process so that body weight to be low in infants. This condition is exacerbated by the still low culture of hand washing. If this condition occurs in a long time and is not accompanied by adequate nutrition for the healing process it will cause stunting. Susenas states that households that have proper sanitation if sanitation facilities meet health requirements, including defecation facilities (alone or together) are equipped with goose neck toilets or closure with a lid and have a septic tank or Waste Water Disposal System (WWDS). RI Ministry of Health (2019) reports that 1 out of 3 households have inadequate sanitation, and 1 in 5 households do not have access to appropriate drinking water sources (tap, public taps, general hydrant, water terminal, Rainwater Reservoir, springs and protected wells, bore wells or pumps) that are at least 10 meters away from sewage, waste storage and waste disposal. Source of clean water does not include bottled water, water from peddlers, water sold through tanks, well water and unprotected springs. Kupang City Health Office (2018) reported that residents with sustainable access to (decent) quality water were only 32,63% and residents with access to proper sanitation were only 39.5%. This condition is estimated to have more influence on increasing indirect stunting (Table 4).

Table 4. Resident with sustainable access against decent cleaning water

No.	Variables	Type of Facility		Eligible Facilities	
		Total (Units)	User Population (Person)	Total (Units)	User Population (Person)
1.	Not a Piping Network				
1.1.	Protected dig wells	4.713	28.041	2.728	15.684
1.2.	Dig wells use a pump	87	2.225	76	1.950
1.3.	Bore wells use a pump	1.404	9.828	816	5.712
1.4.	Water terminal	-	-	-	-
1.5.	Protected springs	15	1.527	6	611
1.6.	Rainwater reservoir	30	155	22	110
2.	Piping Network (PDAM, BP-SPAM)	40.753	167.283	18.202	110.591

3.	Access against decent cleaning water	
	Total	134.654 person
	Percent	32,63%
4.	Access against decent sanitation	
	Total	163.129 person
	Percent	39,50

Source: Profile of Kupang City Health (2018)

Households with good economic status influence the acquisition of better public services such as education, health and infrastructure so as to affect the nutritional status of households because family access to food will be good too (Unicef 2013; Aryastami and Tarigan 2017; Azmy and Mundiastuti 2018). Limited household access to nutritious food has a significant influence on the likelihood of children becoming wasting and stunting. Ni'mah and Nadhiroh (2015) reported that households in the normal toddler group tended to earn enough (50%) compared to stunting toddlers (23,5%).

The stunting prevalence in the Kupang City which is very high is also influenced by the economic conditions of the household, namely the poor population is still high (40,22%), the labour is unlaboforce is also high (82,88%), and household members' income which is still low (90,15%) with a large number of family members (> 4,22 people) being an indicator of the increasing trend in the incidence of stunting. Ni'mah and Nadhiroh (2015) reported that more than half of the stunting toddlers (67,6%) had a family of ≥ 4 people. Riwukore and Habaora (2019^b) state that households with low socio-economic conditions cause primary needs such as food, clothing and housing not to be maximally fulfilled.

Parenting failure from a mother to a toddlers can deficiency of calories (nutrition) and increase the prevalence of stunting in toddlers. Parenting failure shown from the more the gestational age increases, the lower the maternal visit to the Posyandu, including access to health such as immunization and neonatal health visits. This condition led to relatively high neonatal deaths in Kupang City (9,09%) compared to the number of infants born alive. The pattern of mother's care for infants born shows that babies to toddlers are not getting serious attention from a mother towards exclusive breastfeeding and access to health services, such as Card towards Health (KMS) or Child Mother Health (KIA), wasting toddlers get an Additional Food Program (PMT) and vitamin A are still very low. In general, the role of a mother in toddlers care is still very low in Kupang City (Table 5).

Table 5. Patterns for nurturing prospective mothers, pregnant mothers and giving birth mothers

No.	Parenting Pattern	Total (people)	Percent
1.	Pregnant mothers		
	Number of pregnant mothers recorded	9.349	-
	Visit of K1 pregnant mothers	8.834	94,49
	Visit of K4 pregnant mothers	7.447	79,66
2.	Immunization of pregnant mothers recorded		
	Immunization of pregnant mothers TT-1	3.705	39,63
	Immunization of pregnant mothers TT-2	2.978	31,85
	Immunization of pregnant mothers TT-3	2.045	21,87
	Immunization of pregnant mothers TT-4	1.295	13,85
	Immunization of pregnant mothers TT-5	1.159	12,40
	Immunization of pregnant mothers TT2+	7.477	79,98
3.	Immunization ofWUS (15-39 years) recorded		
	Immunization ofWUS TT-1	27	-
	Immunization ofWUS TT...	-	-
4.	Neonatal visit recorded		
	1 time neonatal visit (KN1)	8.028	85,87
	3 time neonatal visit (KN Complete)	7.859	84,06
5.	Infants are born recorded		
	Infants are born alive	8.499	90,91
	Newborns are weighed	8.135	95,72
6.	Early Breastfeeding Initiation (IMD)		
	IMD < 1 hours	5.324	62,64
	IMD \geq 1 hours	322	3,79
	Can not recorded or identification	2.853	33,57

7.	ASI in the last 24 hours	4.660	54,83
8.	Exclusive breastfeeding	2.601	30,60
9.	Infants health services	8.049	94,71
10.	Get health services (at least 8 times)	4.159	51,67
11.	Number of toddlers	39.437	
	Underweight toddlers	240	0,60
	Get treatment	240	100,00
	Toddlers have KMS / KIA	36.085	91,50
	Wasting toddlers can PMT	11.950	30,30
	Toddlers can get vitamin A	36.282	92,00

Source: BPS Kupang City (2019), BPS NTT (2019), Profile of Kupang City Health (2018), processed

Riskesdas (2017) reported that 60% of pregnancies from toddlers aged 0-6 months did not receive Breastmilk properly. RI Ministry of Health (2019) reported that 2 out of 3 toddlers aged 6-24 months did not receive adequate Breastmilk (MP-ASI) supplementary food. No implementation of IMD, failure to provide breast milk, and the process of early weaning are one factor in stunting (Atmarita 2018). Aryastami and Tarigan (2017) state that toddlers who do not get exclusive Breast Milk for 6 months have a high risk of stunting. Ni'mah and Nadhiro (2015) reported that 88,2% of the stunting group of toddlers was caused by toddlers not receiving exclusive Breastmilk for the first 6 months. The large role of exclusive Breastmilk on toddlers nutritional status makes the WHO recommend that implementing Breastmilk enhancement interventions during the first 6 months as one step to achieve WHO Global Nutrition Targets 2025 regarding the reduction in the number of stunting in toddlers (WHO 2014). Paramita and Pramono (2015) reported that the longest percentage of the provision of Breastmilk was in the 0-5 month period of 38,9% (not the period of exclusive Breastmilk).

Not good parenting from a mother for her child is due to the mother's knowledge is still in the low category. Riwukore et.al. (2017) states that the level of knowledge influences attitudes and behaviors in everyday life. One of the causes of growth faltering in a person is the lack of a person's knowledge and ability to implement information that is known in daily life (Riwukore and Habaora 2018^b). Ni'mah and Nadhiroh (2015) reported that knowledge of low maternal nutrition caused the incidence of stunting in infants 3,877 times greater than the knowledge of a good mother. Then it was reported that 61.8% of mothers in stunting toddlers had lower nutritional knowledge.

Knowledge of nutrition is closely related to the level of household education, especially mother's education compared to father. Riwukore and Habaora (2018) state that the role of household consumption is greater for housewives than for husbands because husbands work more so that time with family often decreases. Housewife education is a risk factor for stunting in toddlers because the level of maternal education determines the nutrition obtained (Ni'mah and Nadhiroh 2015; Aryastami and Tarigan 2017; Azmy and Mundiastuti 2018.).

The stunting prevalence in Kupang City is not expected to decline significantly because education of housewives is still relatively low with low hygiene and healthy behavior. Consumptive behavior still has a fairly large percentage in fulfilling household nutrition. Ni'mah and Nadhiroh (2015) reported that more than half of mothers of stunting toddlers had low levels of education. The education status of housewives in Kota Kupang ± 50,95% is still relatively low educated (Table 6).

Table 6. Percentage of housewives based on education status

No.	Variables	Quantity	
		Total	%
Total Sex of Women		201.604 people	
1	No school / no diploma	30.624	15,19
2	Graduated from elementary school	39.353	19,52
3	Graduated from Junior High School	32.740	16,24
4	Graduate High School	56.852	28,2
5	Graduated from Vocational High School	11.129	5,52
6	Graduate Diploma I and II	1.250	0,62
7	Graduated from Academy / Diploma III	5.605	2,78
8	Completed from DIV / S1 / S2 / S3	24.051	11,93
Total		201.604	100

Source: BPS Kupang City (2019), BPS NTT (2019), processed

Low knowledge of housewives causes low attendance rates for mothers and toddlers at Posyandu. The RI Ministry of Health and the World Bank (2019) stated that the attendance rate of toddlers in Posyandu declined from 79% in 2007 to 64% in 2013. Then it was reported that 2 out of 3 pregnant mothers had not consumed adequate iron and limited access to learning services early quality (only 1 out of 3 children aged 3-6 years is not yet in Early Childhood Education / PAUD). The low knowledge of housewives contributes to 1 in 3 pregnant mothers who are anemic. The low knowledge of housewives causes the status of morbidity in housewives in Kupang City to be quite high, which is an average of 20% (Table 7).

Table 7. Status of morbidity in housewivesa

No.	Variables	Quantity	
		Total	%
1	Malnutrition	6	0,65
2	Malaria	669	72,08
3	Anemia	102	10,99
4	Dengue fever	55	5,93
5	PMS (HIV AIDS)	96	10,35
Total		928	100,00

Source: BPS Kupang City (2019), BPS NTT (2019), Profile of Kupang City Health (2018), processed

Knowledge of housewives who are still low accompanied by the economic capacity of consumptive households can increase the incidence of stunting if it is not supported by access to integrated services for pregnant mothers and toddlers who are good, such as Posyandu. Health access for pregnant mothers and toddlers through Posyandu in Kupang City is very limited, of which from 315 Posyandu operating only 41,59% (131 units) of active Posyandu. This condition is increasingly chronic if it is reviewed based on Posyandu strata and the ratio of health services (Table 8).

Table 8. Number of Posyandu by strata

No.	Posyandu Grade	Posyandu				Total
		Active		Passive		
		Total	%	Total	%	
1	Pratama	2	7,94	23	92,06	25
2	Madya	81	50,48	78	49,52	159
3	Purnama	41	36,19	73	63,81	114
4	Mandiri	1	5,40	16	94,60	17
Number of Posyandu		125	100,00	190	100,00	315
Percentage of Posyandu Activities		39,68		60,32		100,00

Source: Profile of Kupang City Health (2018), processed

Stunting carries a risk for Non-Communicable Diseases (PTM) in adulthood, although it can still be corrected at an early age. Aryastami and Tarigan (2017) state that efforts to reduce nutritional problems must be handled cross-sectorally in all lines. Mothers and prospective brides must be provided with sufficient knowledge about nutrition and pregnancy. Exclusive Breastmilk to healthy mothers. Furthermore, MP-ASI must be understood by mothers and health workers optimally.

Based on the results of identification of the causes of stunting in Kupang City, a strategy for handling stunting risk in Kupang City can be formulated using SWOT analysis as shown in table 9 below.

Table 9. Results of the SWOT Analysis

Strategy for Stunting Risk Management in Indonesia	Strength	Weakness
	- There is a Kupang City Government program, namely Free BPJS, MP-ASI,	- Mother's education is low - Consumptive behaviour

	<p>PMT Counseling and Recovery, Nutrition awareness families, IHC, Vit.A high dose, Hope Family, PAUD Free, Exclusive Breastmilk Program.</p> <ul style="list-style-type: none"> - Institutions that support active health programs such as Kupang City PKK, Dekranasda, Health CSR, Health Office, Healthy Kupang Brigade, Education Office, Social Service, Youth Organization. - Health budget from the Kupang City APBD. - Good political will of the Mayor. 	<ul style="list-style-type: none"> - Parenting is weak - Clean and healthy life behavior is low - Posyandu is not active high - Access roads to remote posyandu - Income below the UMP
<p>Opportunity</p> <ul style="list-style-type: none"> - Maternal and child health programs from the Government and the Provincial Government to improve the nutrition of infants and toddlers. - The desire of parents to have healthy children. 	<p>SSO</p> <ul style="list-style-type: none"> - Activating Posyandu and strengthening capacity - Mapping and rationalization of community-based surveillance through the Extraordinary Early Warning System, Food and Nutrition Awareness System to improve the management of nutrition improvement programs. - Synchronization of policies and budgets from the Center to the regions regarding management of improving nutrition of mothers and children. 	<p>SWO</p> <ul style="list-style-type: none"> - Return the function of the posyandu and increase the participation of households visiting the posyandu. - Increased counseling to strengthen the knowledge capacity of housewives. - Strengthening health actor human resources both in Posyandu, Pustu and Puskesmas in the management of nutrition, and management of mothers maintaining family and self health. - Access roads and health infrastructure are made adequate.
<p>Threats</p> <ul style="list-style-type: none"> - Economic needs are getting higher. - Mothers are forced to work to increase the household economy. - The prevalence of stunting according to WHO standards is still acute and chronic - BBLR and morbidity toddlers is high. - The morbidity of housewives (Anemia and PMS) is high. 	<p>SST</p> <ul style="list-style-type: none"> - Posyandu is the basis for supplementation. - Pustu and Puskesmas as a health base. - Active discovery and referral of nutrition, care and mentoring cases after treatment. 	<p>SWT</p> <p>Enhancing cross-sector coordination and cooperation and partnerships with private and business communities through the Model Village in mobilizing resources for food supply at the household level so that consumptive behavior changes into nutrition conscious behavior, increased family purchasing power, and changes in housewife parenting.</p>

4. Conclusion

Strategies for handling stunting risk in Kota Kupang are based on SWOT Analysis as follows.

1. Return the function of the posyandu and increase the participation of households visiting the posyandu.
2. Increased counseling to strengthen the knowledge capacity of housewives.
3. Strengthening health actor human resources both in Posyandu, Pustu and Puskesmas in the management of nutrition, and management of mothers maintaining family and self health.
4. Access roads and health infrastructure are made adequate.
5. Enhancing cross-sector coordination and cooperation and partnerships with private and business communities through the **Model Village** in mobilizing resources for food supply at the household level so

that consumptive behavior changes into nutrition conscious behavior, increased family purchasing power, and changes in housewife parenting.

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