QLL 12

Towards Zero Stunting Initiative
Among Children at the Age of Two Years Old in Kuantan

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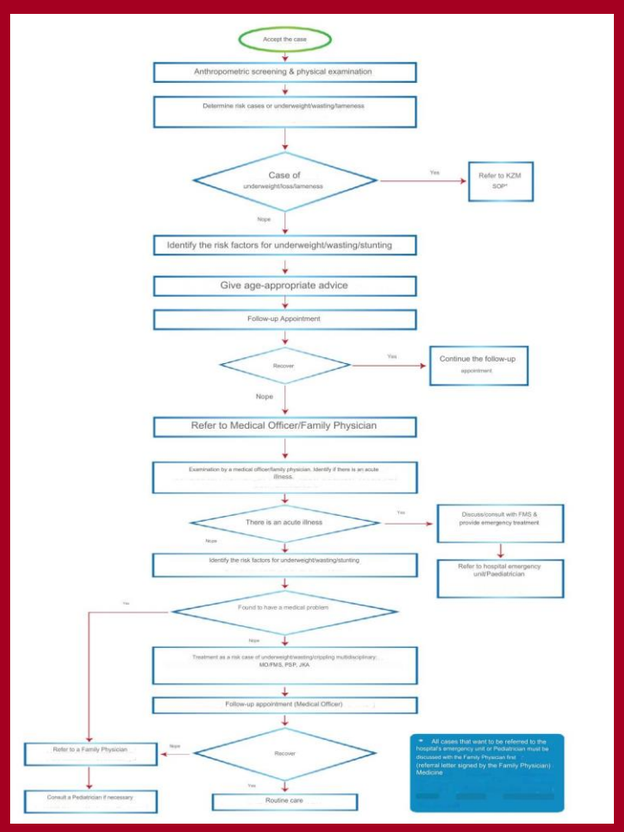
SELECTION OF OPPORTUNITIES FOR IMPROVEMENT

Stunting, if untreated by age two, becomes irreversible chronic malnutrition. Key indicators for assessing nutritional wellbeing among under five children are underweight, wasting, and stunting. In Malaysia, stunting prevalence is highest in Pahang (28.2%). The verification study conducted in 2023 involving 13 clinics in Kuantan revealed that 100% stunted children showed signs of risk before age two. Prompt intervention can prevent the children at risk from deteriorating into actual malnutrition.

SMART CRITERIA

CRITERIA	RATIONAL
SERIOUSNESS	All stunted children showed signs of malnutrition risk before age two must be timely treated to prevent irreversible impact of chronic undernutrition. Thus, reducing cost of rehabilitating the underprivileged malnourished children with food basket.
MEASURABILITY	Anthropometric assessment is conducted for all under five children attending health clinic. Nutritional status is determined based on WHO 2006 Growth Chart interpreted from weight-for-age, height-for-age and BMI-for age.
APPROPRIATENESS	Prevalence of underweight, wasting, and stunting among under five children are the indicators for National Plan of Action for Nutrition of Malaysia III 2016-2025.
REMEDIABLE	The expertise needed are readily available. The solutions are within the potential capability of the staffs involved and resources are possible to be made available.
TIMELINESS	The improvement can be carried out within a reasonable period without depending on operational, financial or political issues which might affect the success of the project.

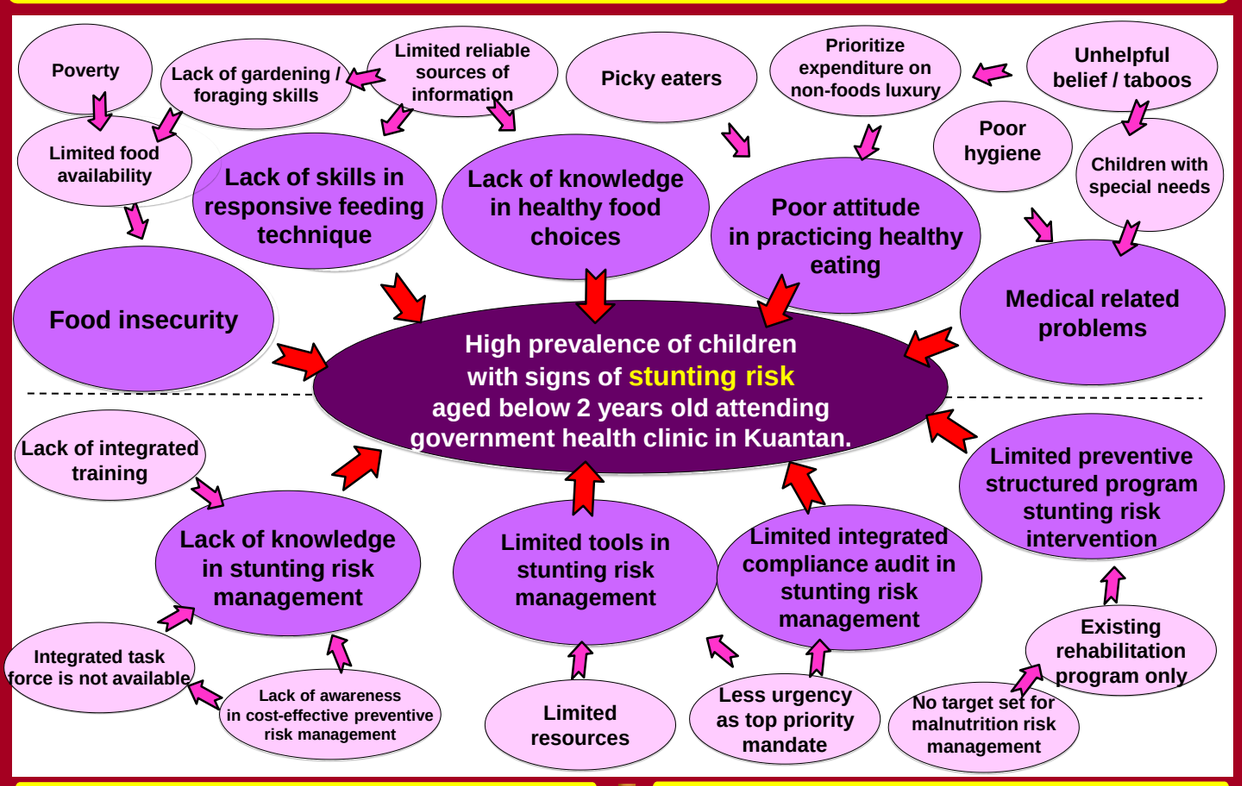
WORK PROCESS



MODEL OF GOOD CARE

No.	PROCESS	CRITERIA	STANDARD
1	Case acceptance for stunted children among new case at the age of two years old.	All case undergo anthropometric assessment and physical examination.	100%
2	Nutritional assessment.	Nutritional status is determined based on WHO 2006 Growth Chart interpreted from weight-for-age, height-for-age and BMI-for age.	100%
3	Nutritional surveillance	Document all cases for monthly Nutritional surveillance,	100%
4	Register and risk factors and cause of malnutrition is investigated.	Registration and investigation is done using standard format.	100%
5	Recommend ViSNA.	Scan QR Code for all mothers of at-risk children for Virtual Self-Help Nutrition Advice (ViSNA).	80%
6	Refer to medical officers.	All unresolved risk malnutrition cases should be referred for medical management.	100%
7	Refer to nutritionist.	All malnutrition cases without medical problems should be referred for medical management.	100%

PROBLEM ANALYSIS CHART

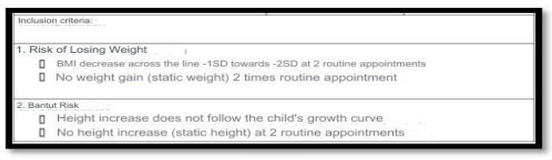


OBJECTIVES

General Objective	To reduce the prevalence of stunting among children aged below 2 years old attending government health clinic in Kuantan.
Specific Objectives	1.To timely detect risk of malnutrition (underweight, wasting and stunting) among infants/children aged ≤2 years old (24 months). 2.To timely intervene risk of malnutrition (underweight, wasting and stunting) among infants/children aged ≤2 years old (24 months). 3.To reduce the risk of malnutrition (underweight, wasting and stunting) among infants/children before the age of 2 years old (24 months).

PROCESS OF GATHERING INFORMATION

Data was collected from case records. The contributing factors were identified through audit checklist to assess the efficacy of stunting prevention in health clinics.


Inclusion criteria:

1. Risk of Losing Weight
- ☐ BMI decrease across the line -1SD towards -2SD at 2 routine appointments
- ☐ No weight gain (static weight) 2 times routine appointment

2. Bantut Risk
- ☐ Height increase does not follow the child's growth curve
- ☐ No height increase (static height) at 2 routine appointments

KEY MEASURES FOR IMPROVEMENT

The indicator used is the percentage of stunting among children at the age of two years old, with a standard of ≤11.8% (NPANM, 2025).

INDICATOR

Numbers of stunted children among new case at the age of two years old

Total of new case for children at the age of two years old attending

X 100%

ANALYSIS AND INTERPRETATION

Factors contributing include poor detection of at-risk children, insufficient knowledge among staff, low compliance in documenting and managing at-risk children, as well as a lack of awareness and knowledge of early warning signs of malnutrition among mothers.

No.	Contributing Factors	(%)
1.	Underprivilege families	95.9
2.	Insufficient portion size of meal intake	56.8
3.	Insufficient meal frequency	52
4.	Limited food availability	75.8
5.	Showing risk for stunting before the age of 12 months old	88.3
6.	Still attending health clinics before they reach 2 years old.	78.8
7.	No documented associated cause of stunting risk.	70.9
8.	Missed the opportunity for stunting risk management.	76.6

STRATEGIES FOR CHANGE

1. User friendly working milestones set for detection and integrated management for stunting risk.
2. Nutritional surveillance now reports monthly, using an upgraded format to capture at-risk children under two.
3. A course on documenting and managing child malnutrition risks was conducted for staff. New format of user-friendly case profile is introduced for both preventive and rehabilitative management.
4. A new audit checklist assessed the compliance of nurses, nutritionists and clinicians.
5. The Virtual Self-Help Nutrition Advice (ViSNA), newly created, offered nutrition advice to mothers of at-risk children.
6. Initiatives like edible gardens aimed for prevention and community empowerment.

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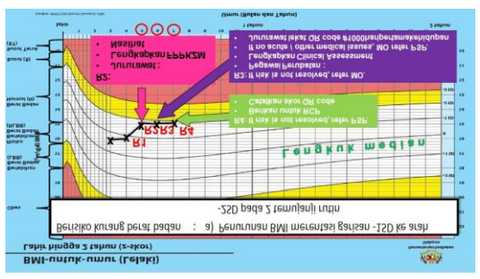

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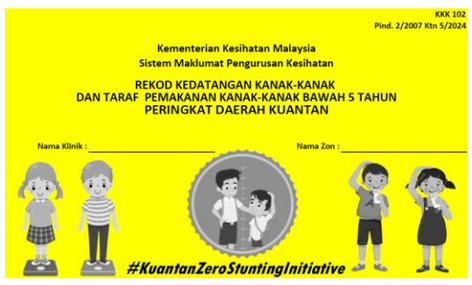

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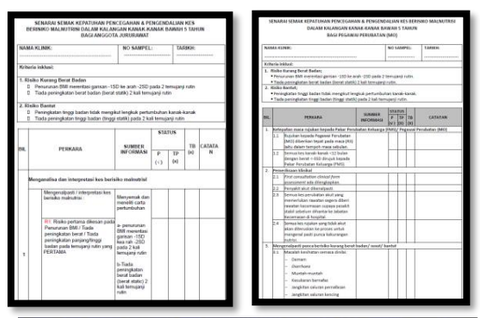

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6.

EFFECT OF CHANGE

1. **Improvements constitute >80% staff training coverage, ensuring competency in managing malnutrition risks.**
2. **All children under two had their nutritional status reported using upgraded documentation and surveillance, ensuring timely detection, investigation, and management.**
3. **As a result, from January-April 2024, 87.8% of new cases had their nutritional status reported, reducing stunting among children under two to 0.2%.**
4. **ViSNA has been officially launched and operational on 20th September 2024.**

RECOMMENDATION

1. **Propose clinic attendance should be made mandatory until 2 years old for nutrition status surveillance.**
2. **All staffs providing maternal and child health services in health clinics must be trained for risk management related to stunting.**
3. **The First 1000 Days advocacy needs to be strengthened in all health facilities including hospitals.**
4. **Breastfeeding promotion and advocacy in all health facilities including hospitals should be strengthened.**
5. **Breastfeeding Support Group (NGOs) at all PTJ level should be mobilized aggressively.**
6. **All under-privileged children from the hardcore poor and poor families are given food baskets.**
7. **Recommendations for the B40 group to receive assistance from the state government such as JAIP, MUIP, Zakat Centre, JKM or JAKOA.**
8. **If there are constraints on the allocation of Food Baskets from the Ministry of Health – propose help from the State Government as well.**
9. **Community empowerment related to promotion of healthy nutrition to pregnant women so that they can act as an agent of change - from community to community initiatives.**
10. **Guidance on edible garden initiatives in collaboration with the Department of Agriculture to increase food availability at household level.**

THE NEXT STEP

The initiative aims for statewide replication and collaboration with government agencies, local authorities, universities, NGOs and the private sector to promote sustainable edible gardens for community empowerment

APPRECIATION

On behalf of Nutrition Unit, we would like to express our sincere admiration for the outstanding support and contributions of Health District Officer, Family Medicine Specialists, Medical Officers, Nurses and Health Education Team. We pride ourselves on the collective hard work and dedication to making this project a fruitful journey together.

REFERENCE

1. Abd. Jamil A et al. 2020. QA Workbook: The Problem Solving Approach – 3rd Edition.
2. BPKK KKM. 2019. Panduan Pencegahan & Pengendalian Kes Berisiko Malnutrisi Dalam Kalangan Kanak-Kanak Bawah 5 Tahun .