

Feeding problem as the risk factors for stunting among under five children in Kuantan – a case control study

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Introduction: Feeding problem in under 5 children refers to feeding practice which is inconsistent with WHO feeding recommendation. This may lead to many negative sequelae particularly stunting which is the most prevalent form of malnutrition in this age group.

Aim: to explore feeding problem as the risk factor for stunting among infants and young children in district of Kuantan, Pahang.

METHODOLOGY

- ✓ **CASE-CONTROL STUDY**
- ✓ **Ratio:** 1 case: 3 control
- ✓ **Case:** 40 children aged 6 to 59 months diagnosed with stunting (low height-for-age)
- ✓ **Control:** 120 children with normal height-for-age
- ✓ **Where:** 7 purposely selected public health clinics in Kuantan district, Pahang
- ✓ **When:** August to October 2021
- ✓ **How:** using interviewer-guided questionnaire; which consists of a socio-demographic and validated ATUCU-5 (Approach to Unwell Children Under 5) feeding assessment checklist.

RESULTS



Children with **FEEDING PROBLEM** have **FOUR-time** higher risk of becoming stunted (OR: 4.2 [95% CI 1.4-12.8], p-value: 0.011) as compared to children with no feeding problem



Children with inadequate **FREQUENCY** of meal have **THREE-time** higher risk of becoming stunted (OR: 2.8 [95% CI 1.1-6.9], p-value: 0.029)



Children with inadequate **VARIETY** of meal have **FOUR-time** higher risk of becoming stunted (OR: 4.2 [95% CI 1.4-12.3], p-value: 0.010)



Children with inadequate **AMOUNT** of meal have **SIX-time** higher risk of becoming stunted (OR: 6.2 [95% CI 2.7-14.5], p-value < 0.0001)

Conclusion:

Feeding problem among under 5 children is an important risk factor for stunting specifically inadequacies in the amount of meal followed by the variety and frequency of meal.

Providing optimal nutritional education and guidance to caregivers of under five children especially in the first 1000 days of life of a child is fundamental and crucial to prevent childhood stunting.

Feeding assessment is recommended in children aged below 2 years during every clinical encounter.



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Feeding Problem as the Risk Factors for Stunting among Under Five Children in Kuantan – A Case Control Study

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Introduction: Feeding problem in under five children may lead to negative sequelae particularly stunting which is the most prevalent form of malnutrition in this age group.

Objective: To explore feeding problems as the risk factors for stunting among infants and young children in district of Kuantan, Pahang.

Methodology: This case-control study was conducted at seven purposely selected government health clinics in Kuantan, Pahang from August to October 2021. A total of 40 children aged 6 to 59 months diagnosed with stunting and 120 children with normal height-for-age were included in the study with a ratio of 1 case: 3 control. Data were collected using an interviewer-guided questionnaire and a validated ATUCU5 (Approach to Unwell Children Under 5) feeding assessment checklist.

Results: In general, children with any feeding problem have more than four-time significantly higher risk of becoming stunted (OR: 4.2 [95% CI 1.4-12.8], p-value: 0.011) as compared to children with no feeding problem. Children with inadequacy in feeding components specifically frequency, variety and amount of meal each have significantly three-time higher risk (OR: 2.8 [95% CI 1.1-6.9], p-value: 0.029), four-time higher risk (OR: 4.2 [95% CI 1.4-12.3], p-value: 0.010) and six-time higher risk (OR: 6.2 [95% CI 2.7-14.5], p-value < 0.0001) of becoming stunted as compared to children with adequate feeding. Additionally, lower birth weight, delivery week, and maternal height were also found as the independent risk factor for childhood stunting among this population.

Conclusion: Providing optimal nutritional education and guidance to caregivers of under five children especially in the first 1000 days of life of a child is fundamental and crucial to prevent childhood stunting.