# INTEGRATING ASSESSMENT OF NUTRITIONAL STATUS INTO THE CLINICAL APPROACH TO UNWELL CHILDREN UNDER 5 IN PRIMARY CARE.



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# Introduction

Target 2.2 and 3.2 of the Sustainable Development Goals (SDG) is to end all form of malnutrition and to end preventable deaths of under five children respectively. Worldwide, more than half of the under five mortalities have underlying malnutrition. In Malaysia, 30% of the under five mortality are preventable and contributed by substandard care. Failure of healthcare providers to identify malnutrition as comorbidity is an issue in the conventional "single condition approach" whilst the local prevalence of childhood malnutrition is still notable.

## **Clinical experience**

WHO/UNICEF have addressed the above challenges by introducing the *Integrated Management of Childhood Illness* (IMCI) strategy in 1995. It combines nutritional element into the holistic management of major childhood illness at primary care level. In Malaysia, IMCI was implemented in several rural predominant areas with poor access to adequate healthcare exclusively in states of Pahang, Sabah and Sarawak

Focusing on undernutrition, Pahang State Health Department in 2015 has came out with the *Integrated Management of Malnutrition in Children Under 5* (IMMCU5) manual which incorporates outpatient care adopted from IMCI with inpatient protocols for severe malnutrition cases.

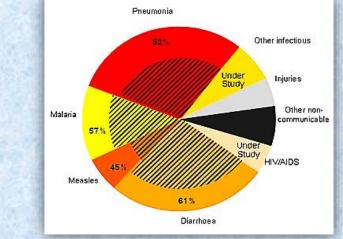
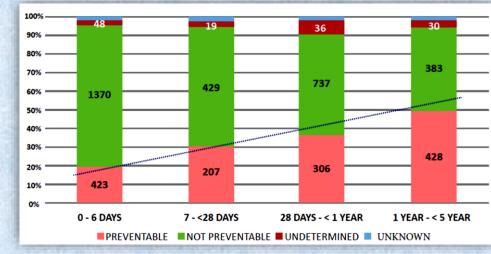
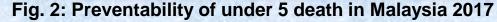
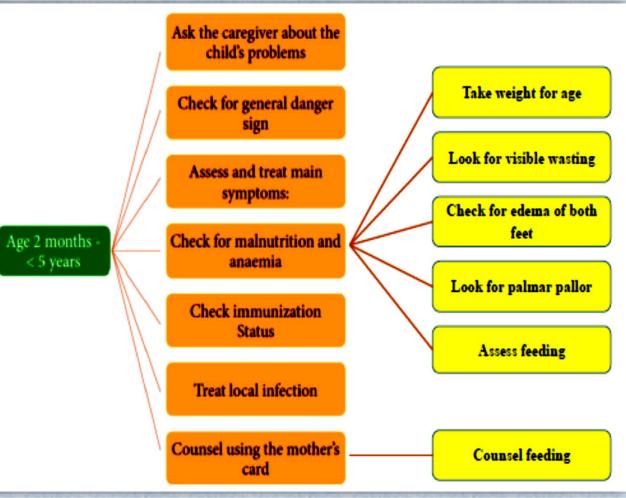


Fig. 1: Contribution of undernutrition to global under 5 death 2013



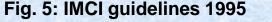




Ministry of Health Malaysia later on adapted IMCI into the *Approach To Unwell Children Under 5 years* (ATUCU-5) manual in 2018. ATUCU5 consolidates key IMCI contents with locally common childhood diseases eg. dengue and it is practiced nationwide.

Author is an IMCI trainer and involved in the development and training of both later manuals.

		F CHILDHOOD ILLNESS
SICK CHILD		Organization Unicel
AGE 2 MONTHS UP TO 5 YEA	RS	Division of Child Health and Development
ASSESS AND CLASSIFY THE SICK CHILD	TREAT THE CHILD, continued	
Assess, Classify and Identify Treatment	Give Extra Fluid for Diarrhoea	MINISTRY OF HEALTH MALAYSIA
	and Continue Feeding	Con Con Con
Check for General Danger Signs	2 Plan A: Treat Diarrhoea at Home	
Then Ask About Main Symptoms:	Plan B: Treat Some Dehydration with ORS 12	
Does the child have cough or difficult breathing?	2 Plan C: Treat Severe Dehydration Quickly	SICK YOUNG INFANT
Does the child have diamboa?	3	AGE 1 WEEK UP TO 2 MONTHS
Does the child have fever?		AGE I WEEK OF TO 2 WONTIG
Classify fever	Immunize Every Sick Child, As Needed	
Does the child have ear problem?		ASSESS, CLASSIFY AND TREAT THE SICK YOUNG INFANT
bes the child have ear problem		
hen Check for Mainutrition and Anaemia	6 Give Follow-up Care	Assess, Classify and Identify Treatment
ssess Other Problems	6	
ssess other Flodens	Pneumonia 14	Check for Possible Bacterial Infection
REAT THE CHILD	Wheeze	Then ask: Does the young infant have diarrhoea?
REAT THE CHILD	Persistent Diarrhoea 14	Then Check for Feeding Problem or Low Weight?
	Dysentery	Then Check the Young Infant's Immunization Status
each the Mother to Give Oral Drugs at Home	Malaria	Assess Other Problems
Oral Antibiotic	7 Fever-Malaria Unlikely 15	
Oral Bronchodilator	7 Measles with Eye or Mouth Complications	Treat the Young Infant and Counsel the Mother
Oral Antimalarial	.8 Ear Infection 16	
Paracetamol.	8 Pallor	Oral Antibiotic
Vitamin A	.8 Very Low Weight 16	Oral nystatin
Iron	8 Feeding Problems 16	Intramuscular Antibiotics
Albendazole	8	To Treat Diarrhoea, See TREAT THE CHILD Chart
	COUNSEL THE MOTHER	Immunize Every Sick Young Infant
feach the Mother to Treat		Treat Local Infections at Home
Local Infections at Home	Food	Correct Positioning and Attachment for Breastfeeding
Treat Eye Infection with	Assess The Child's Feeding 17	Home Care for Young Infant
Chloramphenical Eye Ointment	g Feeding Recommendations	
Dry the Ear by Wicking		Give Follow-up Care for the Sick Young Infant
Treat Mouth Ulcers with Glycerin	0	Local Bacterial Infection
Soothe the Throat, Relieve the Cough with	Fluid	
	g Increase Fluid During Illness	Feeding Problem
a date Reinkay		
Give These Treatments in Clinic Only	When to Return	Thrush
	Advise the Mother When to Return to	
Intramuscular Antibiotic	10 Health Worker 20	RECORDING FORMS
Quinine for Severe Malaria	10	SICK YOUNG INFANT
Prevent Low Blood Sugar		SICK CHILD
Treat Convulsion with Diazepan	.11 Her Own Health 21	
Treat wheeze with Nebulized Salbutamol	.11	WEIGHT FOR AGE CHART



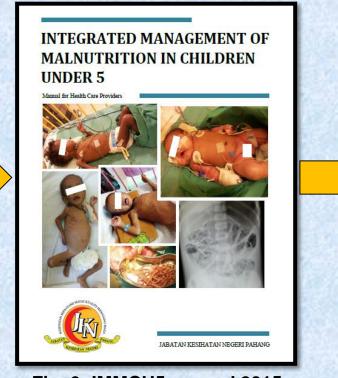




Fig. 3: IMCI strategy for sick child including nutritional assessment

MOH/K/ASA/97.18 (HB)
HARD RESIMATION
TRAINING MANUAL ON APPROACH TO UNWELL CHILDREN UNDER 5 YEARS
Family Health Development Division Ministry Of Health In Collaboration with World Health Organization (WHO)

How many times during the day? Breastfeed during the night?

Do you breastfeed your child?

Does the child take any other food or fluids?

Variety-type of food? Frequency? Amount?

Fig. 8: Feeding assessment in IMCI

### Conclusion

The expansion of IMCI strategy that emphasizes whole person approach and integrates nutritional component into routine clinical encounters would aid to achieve both SDGs target.

# References

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### 2<sup>nd</sup> National Infant and Young Child Feeding Scientific Conference 2021



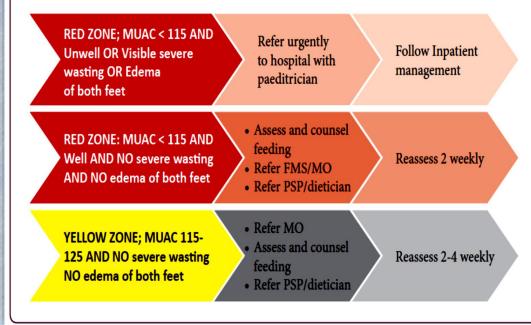


Fig. 9: Outline for management of malnutrition in ATUCU5

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