Are malnourished children hungry? Use of the International Complementary Feeding Evaluation Tool (ICFET) to describe diet and eating behaviour

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Background

Undernutrition risk increases when children transition to complementary feeding in lower/middle income countries.

We are developing a tool to assess and compare complementary dietary practises and feeding and eating behaviour (FEB) worldwide:

International Complementary Feeding Evaluation Tool (ICFET)

Standardised questions on
Breastfeeding
Age of first complementary feeding
Meal frequency
Self-feeding

5-point scores for
Avidity = enthusiasm for eating
Avoidance = food refusal
Force-feeding

Objectives

We aimed to test ICFET's performance in different countries and how FEB varies between wasted and healthy infants.

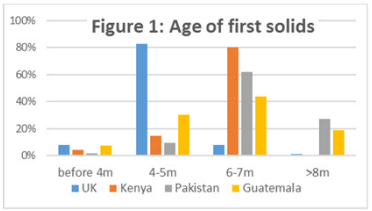
Method

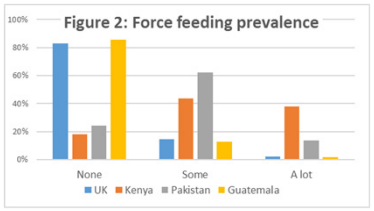
Healthy and wasted (16% BMI<-2SD) children aged 6-24 sampled in 4 settings:
Nairobi, Kenya (n=157), urban slums
Lahore, Pakistan (n=108), peri-urban
Retalhuleu, Guatemala (n=125), rural
Glasgow, United Kingdom (UK, n=97) urban

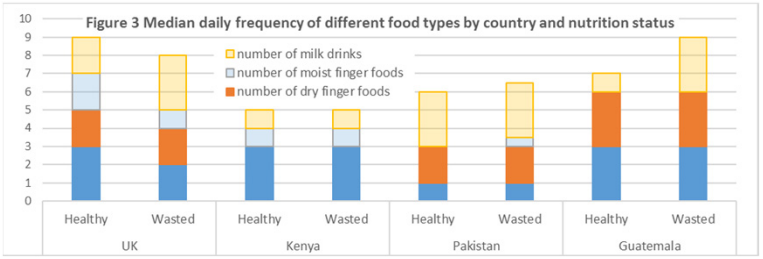
Child welfare and malnutrition clinics

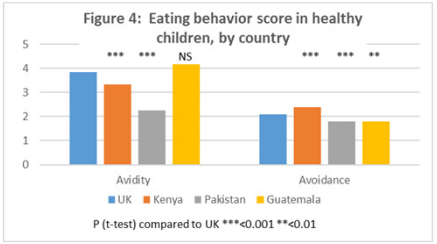
Playgroups and workplace

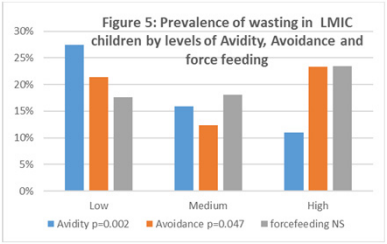
- Children measured
- Parents surveyed using the ICFET,











Results

- Complementary feeding started earliest in the UK and latest in Pakistan (figure 1).
- Force feeding was rare in the UK and Guatemala (but common in Pakistan and Kenya (figure 2).
- Feeding frequency varied markedly by country, but not between wasted and healthy children, within countries (figure 3).
- In healthy weight children, median Avidity was higher than Avoidance;
- Kenyan children had highest avoidance and Pakistani children lowest avidity (Figure 4).

In LMIC children (excluding UK) (figure 5)

- Children with low Avidity were more likely to be wasted
- Children with both low and high Avoidance were more likely to be wasted.
- Force feeding levels were not significantly related to wasting

Conclusions

- **The ICFET revealed striking differences between countries in complementary feeding patterns**
- **Wasted children tend to have lower avidity, but may have increased or decreased food refusal**
- **The ICFET will be valuable for the identification of poor feeding and eating practices and to inform future intervention**









