

ICCN Poster Presentations

Food and the child

Dietary intake of macro and micronutrients in children: does recurrent illness reduce intake?

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Introduction: Approximately one third of children in Sri Lanka suffer from undernutrition. Recurrent infections that may lead to reduce dietary intake are thought to be an important cause of undernutrition in children.

Objectives: To compare dietary intakes of macro and micronutrients in children with recurrent infections and healthy controls.

Methods: 364 children, aged 5-10 years, who were recruited from the Children's hospital, Colombo, Sri Lanka for a study on iron and infection had their dietary intake assessed during a period of 8 weeks. Children with a past history of recurrent upper respiratory tract infections (URTI) with clinical and laboratory evidence of URTI during the observation period were the infection group (n = 180), while children without infections were controls (n = 184). A 24 - hour recall of the preceding day's diet was obtained at baseline, week 4 and week 8 (on 3 days) using a dietary data questionnaire incorporating common foods consumed in Sri Lanka. Food composition tables specially prepared for assessment of Sri Lankan diets were used to calculate nutrient intakes.

Results: Children in both groups were of similar low socio-economic status. Analysis of dietary data indicated that children with infection and controls had lower intakes of energy, protein, carotene and ascorbic acid than recommended dietary allowances for their age groups. No significant differences were noted in average intakes of nutrients/day between infection and control groups; energy: infection group; 974 ± 198 kcal, controls; 979 ± 109 kcal (P = 0.80), protein: infection group; 29.6 ± 8.5 g, controls; 28.8 ± 7.4 g (P = 0.37), iron: infection group; 11.0 ± 3.7 mg, controls; 11.2 ± 4.0 mg (P = 0.52), ascorbic acid: infection group; 10.3 ± 12.4 mg, controls; 11.7 ± 12.6 mg (P = 0.32) and vitamin A: infection group; 143.0 ± 118 µg retinol activity equivalents (RAE), controls; 149.6 ± 117 µg RAE.

Conclusions: Children with URTI and healthy controls had similar dietary intakes. Recurrent mild infections may not be a cause of undernutrition in 5-10 year old children. Acknowledgements: International Life Sciences Institute, USA

A comparison of the smoking habits of Aboriginal mothers and non-Aboriginal mothers while breastfeeding.

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Women of childbearing age who smoke expose their unborn foetus and then their children to the effects of passive smoking. In addition maternal smoking has been shown in numerous epidemiological studies to be negatively associated with both the initiation and duration of breastfeeding. In general, women who smoke are less likely to initiate breastfeeding and to breastfeed for shorter periods. In Australia estimates from the 2001 National Drug Strategy Household Survey (NDSHS) show that about 3.1 million Australians (19.5% of people aged 14 years and over) smoke tobacco on a daily basis. The same survey found that almost half of the Aboriginal population surveyed reported that they smoked on a daily basis.

Objective: To document the smoking practices of Aboriginal mothers living in Perth during pregnancy and during the subsequent year while feeding their infants.

Method: Two cohorts of mothers were followed from the time of delivery for 12 months (Aboriginal mothers) and six months (Non-Aboriginal mothers) to obtain details of infant feeding practices. The cohorts consisted of a total of 455 Aboriginal and 556 Non-Aboriginal mothers

Results: Prior to and during pregnancy, 67% of the Aboriginal and 18.3% of Non-Aboriginal mothers smoked regularly. For Aboriginal mothers the rate appeared to decline slightly with the length of breastfeeding, but the trend was not significant. Amongst Aboriginal women there was no difference in the percentage of smokers and non-smokers who initiated breastfeeding. While fewer Aboriginal women who smoked were still breastfeeding at 24 weeks postpartum, compared with non-smokers (58% vs 64%), this difference was not significant. In the cohort of Non-Aboriginal very few of the smokers continued to smoke while they were breastfeeding, most claimed to have stopped or to have only an occasional cigarette away from their infant.

Conclusions: The percentage of women smoking in this study is consistent with rates reported in the 2001 National Drug Strategy Household Survey. The high level of smoking while breastfeeding by Aboriginal women is a matter for public health concern.