Administration of paracetamol for childhood fever; practices of parents

Wanni Arachchi TI¹, Gamage MWK¹, Jayasinghe SS²

¹BSc. Nursing Degree Programme, ²Department of Pharmacology Faculty of Medicine. University of Ruhuna, Sri Lanka.

Introduction

Parents are anxious when dealing with childhood fever. As a result, there is inadvertent usage of over-the-counter antipyretics such as paracetamol. Therefore, we aimed to evaluate parental practices of paracetamol usage for fever management.

Methods

٥C

A community based descriptive cross-sectional study was conducted using a pretested interviewer administered questionnaire. Convenient sampling method was used to cover 50% of the total Public Health Midwife (PHM) areas of Bope-Poddala MOH area. One parent from each family with children under five years of age was considered. The questionnaire consisted of 12 questions including inquiries on dose, frequency of administration and measuring device.

Results

One hundred and six parents (89.6% mothers) participated. Mean (SD) age of participants was 32 (5.9) years. When a child gets fever, 62.3% (66) of parents administered paracetamol without medical advice. Fifty-one percent (54) of parents followed dose recommendations accompanying the product leaflet, 31.1% doctors' advice, 13.2% both above and 4.7% other sources. The correct dosing was significantly associated with following package label instructions (P=0.043). There was a statistically significant association between parents' age and correct dosing (P=0.048).

The measuring devices used were the standard measuring cup (83%), teaspoon (6.6%), syringe (4.7%) and the dropper (5.7%). Among the teaspoon users, only two knew its capacity correctly.

At instances of high fever, 45.3% of the parents maintained recommended dosing frequency while 50.9% exceeded the frequency.

Fifty-nine percent of the respondents had given weight appropriate dose; 15.1% sub therapeutic dose and 25.5% supra-therapeutic dose. Level of education was not associated with correct dosing (P=0.1). There were statistically significant associations between the educational level and the decision of dosage based on doctor's advice (P=0.02) and following product leaflet information (P=0.02).

Conclusions

In the sample studied, non-adherence to correct dosage was common. Parents exceeded the recommended dose frequently. To avoid serious health consequences, printing dose calculation on the product leaflet in large font, display the dosing instructions in pharmacies and regular advice to parents on management of childhood fever at PHM clinics are recommended.