

## EXTENT OF INAPPROPRIATE PRESCRIBING OF DOSE AND DOSAGE FORMS OF ORAL MEDICINES IN CHILDREN

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### BACKGROUND

In resource limited settings, lack of appropriate formulations makes dosing of oral medications less precise and less safe in children.

### OBJECTIVE

To determine the extent of inappropriate dose and dosage forms of oral medications prescribed to children.

### METHODS

This is a part of an ongoing large scale study on rational use of oral dosage forms (ODF) of medicines in children in a Sri Lankan Teaching Hospital. 600 ODF of medicines prescribed for children younger than 12 years in ward, clinic and outpatient setting over a period of 4 months was reviewed by the researchers using validated prescribing indicators. Required data were extracted from the prescriptions or bed head tickets using a structured pre-tested observation sheet. Standard formularies were used to determine the weight appropriate dose and age appropriate dosage forms. Descriptive statistics were used in analysing the data.

### RESULTS

Of the 721 medicines prescribed for 249 children, 600 [83%, 95%CI:82-86] were ODF with an average of 2.4 [range 1-7, SD =1.08]. Inappropriate dosing was observed in 47% [95% CI:43-51] with under and over dosing accounting for 52% and 48% respectively. Age inappropriate ODFs was observed in 9% [95% CI:6.7-11.2] where tablets were prescribed to children 2 years: Majority were for vitamins. Of the 222 solid ODFs, almost one-third required manipulation of adult strengths. Majority were for vitamins and antiepileptics.

### CONCLUSION

Prescribing inappropriate dose is more prevalent than inappropriate dosage forms. Underlying reasons and outcomes of these inappropriate prescribing need to be investigated further.

