Appropriateness of Prescriptions for Common Cold

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Sir,

The use of cough and cold medications (CCM) is rampant despite the lack of explicit guidelines on their use in terms of doses, frequency and duration [1]. This observation is of serious concern as now recent reports suggest their association with deaths of young children [2–5]. Their ingredients like promethazine, chlorpheniramine, pseudoephedrine, phenylephrine, and dextromethorphan have been held responsible as reported by CDC, ACFRP data, Marinetti et al. and Wingert et al. [2–5].

Overdosing and self medication of CCM has often been attributed to their toxicities but are we, clinicians causing unintentional harm to our patients by prescribing CCM in erroneous doses.

We carried out an audit of prescriptions for common cold in pediatric OPD of a tertiary care hospital, screening a total of 1200 prescriptions. Almost all the prescriptions showed use of CCM. The most commonly used ingredient was chlorpheniramine [944 patients] followed by pseudoephedrine [557], phenylephrine [387], dextromethorphan [239] and promethazine [156]. The age distribution for 0–6 mo, 7 mo–2 y, 2–6 y and more than 6 y was 156, 298, 456 and 290 respectively. Seventy-seven prescriptions did not have any dose or duration written on it. So we can assume that it was left on the choice of the caretaker to give any dose to their kids. The chances of overdosing are maximum with such prescriptions. Out of the remaining 1123,232 prescriptions showed drugs written in tea spoonful (tsf) and 891 in milliliters (ml). Prescription in tsf has the risk of overdosing as the spoon size may vary in different families. Even

mentioning doses in ml, is not a secure solution as now the US Food and Drug Administration (FDA) says that CCMs should not be given to children younger than 2 y, and the FDA's Nonprescription Drugs along with Pediatric Advisory Committee's advice include children up to 6 y regarding the cautious use of CCM. Only 8 prescriptions did not write any CCM in 0–6 mo's babies.

We did not find any correlation of doses according to age or weight. We could categorize the volumes of drugs used as 2.5 ml, 3.5 ml and 5 ml in younger children while 6 ml and 7.5 ml in older ones. Tablets were also prescribed in a same way. We can say doses were based on self assumption. Regarding frequency, 989 prescribed the medicine thrice a day and remaining twice a day. The mean duration of treatment was 5 d (range 3–7). In the absence of definite guidelines we write CCM the way we believe. This is obviously dangerous to patients.

Hence, above observations suggest the efforts should be made to curtail this practice by creating awareness among the clinicians and the need to conduct studies to document effective doses, frequency and toxicities of CCM.

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