

The Hidden Dangers of Cough Syrup Misuse in Infants in Pakistan: A Call for Awareness and Regulation

ABSTRACT:

CCMs (Cough and cold medications) are an issue of increasing healthcare concern thrown in the face of misuse in infants. It is among the growing concerns and often underestimated in Pakistan. There are various health authorities worldwide beyond ban from the FDA from CCM use in infants below two years, yet they continue to be misused given ignorance, easy availability, and cultural practices. "The incidence of accidents and unsupervised ingestion is alarmingly rising," says a study. It makes children suffer from symptoms like tachycardia, which sometimes leads to death in the worst cases. The letter pleads for urgent public health awareness, regulatory enforcement, and better labelling to protect the tender paediatric population in this regard from avoidable injury. Dextromethorphan and diphenhydramine are cough and cold medications that have some serious effects, and if misused, may cause serious harm in infants. It is an increasing health concern but most often neglected in Pakistan as well as other countries. In spite of the worldwide health advisories, including those provided by the FDA with prohibitions issuing such medications to children below two years of age, children are administered cough and cold medications by their parents under ignorance, easy availability, and cultural practices. In fact, research shows that "incidence of accidental and unsupervised ingestion is alarmingly rising". It is caused mainly in children by such effects, leading to symptoms from mild to severe, such as irritability, tachycardia, and even death. This letter underscores the urgency for public health education, regulatory enforcement, and better labelling within the context of protecting vulnerable paediatric subjects from avoidable harm in ways.

INTRODUCTION:

Cough syrup, a commonly used over-the-counter medication, serves to alleviate cough symptoms in adults but raises significant concerns when administered to infants due to potential health risks. As a doctor and a member of the community, I believe it is crucial to address this issue promptly. The accessibility and misuse of cough syrup among infants can have serious consequences on their health and well-being, highlighting an urgent need for awareness and regulation in our healthcare practices.

In 2020 Robert et al reviewed 6618 cases and out of this 2028 cases were exposed to Diphenhydramine (DPH), one of the ingredients in cough syrups. 79.5% of these cases involved children of 2->4 years and were due to accidental ingestion. Side effects included increased heart rate, frustration, dilated pupil and increased sleep [2]. In 2022 George et al studied 3134 cases and majority of them suffered from adverse effects of Cough and cold medication (CCM) due to accidental unsupervised Ingestion. DPH and dextromethorphan were the key contributors to accidental unsupervised Ingestion (AUI)[3]. In addition, a systemic review was done on 92 articles that showed Over the counter (OTC) misuse was common in infants [4]. Furthermore, a study in Kenya concluded that more than 1/3rd of mothers dispensed supratherapeutic dose of cough syrups to children [5].

The use of cough and cold medications (CCMs) in infants has been a longstanding concern in Pakistan, persisting as a significant public health issue to this day. Despite the US Food and Drug Administration's (FDA) 2008 Public Health Advisory recommending against the use of CCMs in children under two years old, and subsequent label revisions by manufacturers to explicitly state "do not use" in children under four years old [6], these warnings often go unheeded. Alarmingly, many parents continue to misuse these medications as a means of sedating their children, underscoring the need for heightened awareness and education to mitigate this critical problem. A major factor is lack of knowledge among

parents and caregivers which significantly contributes to CCM misuse among infants, this leads to surge in hospitalisation rate and has a significant effect on Pakistan's economy.

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Conflict of interest: **None**

Funding: **None**