

tried and used by a significant number of adolescents. In spite of a ban issued in Bangalore against Hookah cafes, they continue to thrive in the city and contribute to a huge number of children being addicted to the same. This; however, may not reflect the situation in other parts of India, as hookah consumption is closely linked to the availability and presence of joints in the vicinity. We also found 'sniffing' being high prevalent among urban adolescents. A previous review of all substance abuse in India has not reported this finding [5].

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## Updated National Guidelines for Pediatric Tuberculosis: Concerns Regarding Neurotuberculosis

I read with interest the recent Updated National guidelines for pediatric tuberculosis in India [1]. There are few important concerns in guidelines regarding neurotuberculosis which I wish to highlight.

First, there are discrepancies in dose ranges of isoniazid, rifampicin and pyrazinamide from the latest WHO guidelines and should be corrected. WHO currently recommends the following daily doses of antituberculosis medicines for the treatment of tuberculosis in children: isoniazid–10 mg/kg (range 10–15 mg/kg); rifampicin–15 mg/kg (range 10–20 mg/kg), pyrazinamide–35 mg/kg (30–40 mg/kg); ethambutol–20 mg/kg (15–25 mg/kg) [2]. It is important as upper end of the recommended dose range should be considered in neurotuberculosis in view of uncertain penetration of antituberculosis medicines into the central nervous system. The dose range suggested in published national guidelines probably follows WHO 2006 guidelines and should be corrected according to WHO 2009 guidelines. Second concern is regarding the duration of antitubercular therapy in neurotuberculosis. WHO recommends that duration of antitubercular therapy should be at least 12 months [3]. Similarly, a systemic review also identifies that there is no evidence base for shorter duration regime [4]. So, the recommendation of

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shorter 9 months duration is inappropriate and not evidence-based. Third, selection of third drug as ethambutol in continuation phase of previously treated cases has poor evidence-base with regard to neurotuberculosis. As pyrazinamide has better central nervous system penetration and bactericidal effect, it is probably a better choice as the third drug in continuation phase of previously treated cases.

Overall, I must congratulate authors for very comprehensive guideline and I hope the revised version would focus on the concerns regarding neurotuberculosis.

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