

3. Blass EM, Barr RG. Evolutionary biology and the practice of medicine; the case of management of infant pain experience. *J Dev Behav Pediatr* 2000; 21: 283-284.
4. Craig KD, Korol CT, Pillai RR, Challenge of judging pain in vulnerable infants. *Clin Perinatol* 2002; 29: 445-457.
5. Gray L, Miller L W, Philipp BL, Blass EM. Breastfeeding is analgesic in healthy newborn. *Pediatrics* 2002; 109: 590-593.

Tobacco use Among School Students in India: The Need for Behavioral Change

Very few studies were reported on tobacco use in Indian school students in the past. Recently the global youth tobacco survey (GYTS) collaborative group(1) initiated a worldwide survey of students of the 13-15 years age in 150 countries including India. The objective of this letter is to highlight the lack of awareness of the harmful effects of tobacco use observed from first report(2) of GYTS in school children of Northeastern states of India. The State wise frequency of current tobacco use in any form and in cigarette form in some selected states of India reported by GYTS Collaborative Group(1) is shown in *Fig. 1*. It is evident from the figure that the frequency of tobacco use among school students is alarmingly high in North-eastern states of India and Bihar.

The current tobacco use (both smoke and smokeless) in any form in these Northeastern states(2) among boys was ranging from 50.4% to 74.4% while the use among girls ranged from 32.0% to 56.4%. The frequency of smoking among boys was from 28.6% to 40.8% and that of girls was from 8.9% and 28.2%. The use of cigarette among boys was from 13.1% to 32.8% and among the girls was

from 2.5% to 13.4% in different states. The frequency of smokeless tobacco use among boys was from 35.0% to 52.5% and the girls 26.8% to 47.2%. These findings indicate high frequency of tobacco use even among girl students in the Northeast part of India. On the hand a Recent report of GYTS from Tamil Nadu(3) documented a low (7.1%) frequency of current tobacco use among school students.

It appears that the school students from North-eastern states(2) know very little about the ill effect of tobacco use and schools did not include much to its curriculum to educate the students on ill effects of tobacco use. Studies that determined the magnitude of tobacco use stressed the need for school health education programs to control this epidemic. To our knowledge, there is only one unique Indian study(4) of school-based intervention to reduce tobacco use among 12-year-old

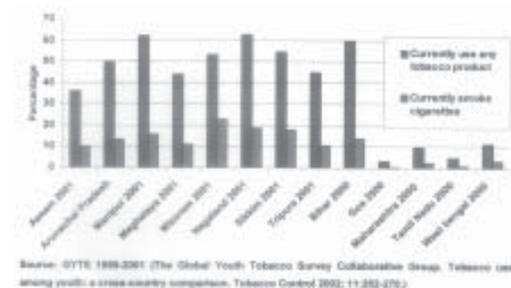


Fig. 1. Percentage frequency of tobacco use among school students in some selected states of India.

students. It was observed that intervention students were less likely to experiment or initiate, receive or intention to use tobacco than their non-intervention counter parts.

Thus, for preventing onset of tobacco use such intervention programs in the early adolescent period are essential on priority basis to bring behavioral change in school students especially in Northeastern states and Bihar.

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REFERENCES

1. The Global Youth Tobacco Survey Collaborative Group. Tobacco use among youth: A cross-country comparison. *Tobacco Control* 2002; 11: 252-270.
2. Sinha DN, Gupta PC, Pednekar MS. Tobacco use among students in the eight North-Eastern States of India. *Indian Journal Cancer* 2003; 40: 43-59.
3. Gajalakshmi V, Asma S, Warren CW. Tobacco survey among youth in South India. *Asian Pac J Cancer Prev.* 2004; 5: 273-278.
4. Reddy KS, Arora M, Perry CL, Nair B, Kohli A, Lytle LA, *et al.* Tobacco and alcohol use outcomes of a school-based intervention in New Delhi. *Am J Health Behav* 2002; 26: 173-181.

Diagnosing Adrenal Dysfunction in Thalassemic Children: A Note of Caution

The article on adrenal function in thalassemic patients by Srivatsa, *et al.* made interesting reading(1). However, I would like to bring to the notice of the authors, certain aspects of the study.

1. While using 1 µg ACTH stimulation tests, it is the 30 minute cortisol and not the 60 minute cortisol that forms the basis of diagnosis of adrenal insufficiency(2). Although the authors have mentioned that one patient had adrenal insufficiency by 1 µg ACTH test, the absolute values are not given in the article.
2. Standard commercial preparation of 1 µg ACTH is not available. It is usually

prepared by diluting 250 µg ACTH. These are stored over time and used as and when patients are tested. However, ACTH is easily degradable and the biological activity decreases over time. The activity of the ACTH preparation has to be determined at the end of the study as described by Gandhi, *et al.*(3)

3. The authors have used basal cortisol <400 nmol/L (14.5 µg/dL) to define abnormal adrenal function. This is a rather high value for making a conclusive diagnosis of adrenal dysfunction despite the explanations given by the authors. A very low early morning plasma cortisol (<138 nmol/L, 5 µg/dL) is highly suggestive of adrenal insufficiency, but lacks sensitivity because most patients with adrenal insufficiency have cortisol values exceeding this value. Sensitivity is increased by raising the cut off value for a presumptive diagnosis to 275 nmol/L (10 µg/dL), but