

Age at Menarche in Adolescent Khasi Girls, Meghalaya

The mean and median age at menarche in 360 Khasi girls was found to be 13.22 ± 0.88 and 12.13 ± 0.79 years, respectively; socio-economic status was observed to be a strong predictor of age at menarche in this population.

Key words: Education, India, Khasi, Socio-economic status, Menarche.

Studies have reported varying mean age at menarche in different population groups and in different parts of India, ranging from 12.3 years in Bengali girls [1] to 15.4 years in lower socio-economic group of western India [2]. The studies undertaken on the secular trend of menarcheal age among Indian girls show declining trend of approximately five to six months per decade during the last forty years, that appears to have ceased now [3]. Though age at menarche has been reported in many Indian sub-populations, but no information is available on the Khasi tribe of Meghalaya.

A cross-sectional study was carried out in North Eastern India in the seven blocks of East Khasi Hill district of Meghalaya from June 2005 to January 2006. Recalled age at menarche and socio-demographic characteristics were obtained from 360 adolescent girls through a pretested structured schedule. The age at menarche was found to be 12.1 years by probit analysis and 13.2 years by recall method. Mean age at menarche of Khasi girls is higher than that of several other populations of the world: 13.1 years and 12.9 years in southern England and North-West England, respectively [4], and 12.5 years in United States [5]. However, some of the studies among other populations of India show a similar trend of higher mean menarcheal age: 13.88 years in urban Andhra Pradesh [6] and 13.85 years in rural Jammu [7], while a lower age at menarche (12.3 years) among Bengali girls of North Kolkota was reported by Banerjee, *et al.* [1]. This indicates

towards an early age at menarche among girls of eastern region of India than rest of India. Rural Khasi girls had a lower age at menarche (13.01 ± 0.73) as compared to their urban counterparts (13.40 ± 0.96). The present study also found significantly higher mean age at menarche among girls with high educational status of parents as well as subjects own educational level. No statistically significant difference was observed in the mean age at menarche among various subgroups of family income and size of family. However, girls belonging to small family size (having 1 or 2 children) reported early menarche than girls belonging to larger family (having more than 6 children). This suggests early menarche is favoured by the higher living standards of the small families. Further study in a larger population would help to evaluate and confirm the findings of the present study.

Roumi Deb

*Amity Institute of Biotechnology, Amity University,
Sector-125, Noida, Uttar Pradesh, India.
rdev@.amity.edu*

REFERENCES

1. Banerjee I, Chakraborty S, Bhattacharyya NG, Bandyopadhyay S, Saiyed HN, Mukherjee D. A cohort study of correlation between body mass index and age at menarche in healthy Bengali girls. *J Indian Med Assoc.* 2007;105:75-8.
2. Rao S, Joshi S, Kanade A. Height velocity, body fat and menarcheal age of Indian girls. *Indian Pediatr.* 1998;35:619-28.
3. Bhaskaran M, Devi G. Is there a secular trend in the menarcheal age of Indian girls? *Indian J Physiol Pharmacol.* 2003;47:361-2.
4. Whincup PH, Gilg JA, Odoki K, Taylor SJC, Cook DG. Age of menarche in contemporary British teenagers: survey of girls born between 1982 and 1986. *Brit Med J.* 2001;322:1095-6.
5. Anderson SE, Dallal GE, Must A. Relative weight and race influence average age at menarche: results from two nationally representative surveys of US girls studied 25 years apart. *Pediatrics.* 2003;111:844-50.
6. Reddy BKC, Radhika P. Age at menarche and some bio-social factors among the girls of Nellore, Andhra Pradesh. *Anthropologist.* 2003;5:215-6.
7. Sharma N, Vaid S, Manhas A. Age at menarche in two caste groups (Brahmins and Rajputs) from rural areas of Jammu. *Anthropologist.* 2006;8:55-7.