

## Commentary

# Clinical and demographic profile of cleft lip and palate in Sub-Himalayan India: A hospital-based study

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Authors have analyzed the demographic and clinical profile of cleft lip and palate (CLP) patients and the antenatal profile of their mothers in the Sub-Himalayan Garhwal region of India. This is a study of a large number of cleft patients with important findings. This article objectively presents the effect of poor economy and illiteracy of the region. Over 40% of antenatal mothers

were anemic, almost all the cleft children were anemic and majority had eosinophilia. Many other relevant demographic data have been presented. This is a hospital-based study with its inherent errors of such studies.<sup>[1]</sup> This does not speak of the true demography of the region. In spite of this error, such demographic analysis is of great importance. For example the analysis of religion amongst the cleft patients will be useful if it is correlated with the population of different religious groups in the community. Hence any demographic analysis of a disease should be correlated with the demography of the population there in.

In India, late arrival is a rule rather than an exception as is true in the Sub-Himalayan Garhwal region as per this study. Only 43.62% children were operated before 2 years of age. Surgery has been performed up to 40 years of age. While analyzing the Indian Smile Train data of more than 280,000 cleft surgeries, it was observed that the median age of primary cleft surgery is 2.55 years.<sup>[2]</sup> This indicates that majority of Indian cleft children are missing the right age at surgery. One can either plan a strategy to bring these children to the operating room early by educational drive and motivation or one can adopt a modified schedule of cleft lip and palate repair to perform the functional surgery as early as possible as proposed by Agrawal and Panda in 2011. This primary surgery schedule has been designed to improve the compliance of parents to submit their cleft children for surgery on time. However, there are many other technical advantages of this schedule.<sup>[3]</sup>

In rural India maternal anemia is a common finding. In spite of national program of maternal and child health care through National Rural Health Mission, almost half the mothers were not receiving iron and folate supplement during their antenatal period. The local administration should be apprised of this short coming. Very high incidence of microcytic hypochromic anemia in cleft children is an indicator of poor food supplement. The cleft care centers have the responsibility of teaching and training mothers of cleft children to provide proper food quantitatively as well as qualitatively.

In the present study parents of 51.9% cleft children were illiterate and belonged to poor socioeconomic status.<sup>[1]</sup> Surprisingly in spite of such a high percent illiterate population, 76.9% parents and patients got to know about the surgical facility through the print media. This indicates the social bonding in the society. Very

few of them came to know about cleft surgery through Internet. This indicates that the use of information technology for public education may not be successful at present. In our country we have a large population who still believe that cleft is caused by an eclipse.<sup>[4]</sup> Hence the Indian cleft surgeons have the responsibility of educating and motivating the parents to bring in the children for early surgery and of course multidisciplinary care. We have to walk this extra mile for improving the scenario of cleft care in India.

There are sporadic demographic data from some of the Indian states.<sup>[4,5]</sup> However there is a lack of national data on epidemiology and demography of CLP patients. Considering the huge population of over 120 billion, it is practically impossible to screen the whole population. However one can adopt a sampling system, analyze the national birth registry,<sup>[6]</sup> or impress upon the government to include CLP in a national census as a visible congenital deformity.

To conclude, with the help of the demographic profiles one can analyze to plan the future course of action to improve the cleft care. Regional demography has its own place especially in a vast country like India. However ultimate goal should be to have a national registry and attempt should be made to collect and analyze the national data.

## REFERENCES

1. Dvivedi J, Dvivedi S. Clinical and demographic profile of cleft lip and palate in Sub-Himalayan India: A hospital based study. *Indian J Plast Surg* 2012; 45:115-20.
2. Agrawal K. Mission impossible made possible. Presented during X<sup>th</sup> Annual National Conference of Indian Society of Cleft Lip Palate and Craniofacial Anomalies, 'Indocleftcon', Bangalore, 2012.
3. Agrawal K, Panda KN. A Modified Surgical Schedule for Primary Management of Cleft Lip and Palate in Developing Countries. *Cleft Palate Craniofac J* 2011;48:1-8.
4. Reddy SG, Reddy RR, Bronkhorst EM, Prasad R, Ettema AM, Sailer HF, et al. Incidence of cleft Lip and palate in the state of Andhra Pradesh, South India. *Indian J Plast Surg* 2010;43:184-9.
5. Sridhar K. A community-based survey of visible congenital anomalies in rural Tamil Nadu. *Indian J Plast Surg* 2009;42: S184-91.
6. Chen BY, Hwang BF, Guo YL. Registry in Taiwan, 2002. *J Formos Med Assoc* 2009;108:460-8.

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