

## Physical and psychological impact of cleft lip & cleft palate in children & adolescents- Results from a surgical mission project in underserved Armenia, Colombia

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**Introduction:** Cleft Lip and Cleft palate (CL/CP) are birth defects that occur in early pregnancy and results from incomplete fusion of lip or palate or both. These defects can cause both physical and psychological problems. These issues are not well documented among South American population.

**Methods:** The operation San Jose mission project funded by The CHRISTUS Foundation for HealthCare organized the camp. A group of plastic surgeons, anesthesiologists, pediatrician, nurses, speech therapist, nutritionist, and volunteers from Houston participated in the camp. The medical group in Armenia screened patients for the camp. All the eligible patients and families were given a survey in Spanish to evaluate demographics, physical and psychological issues before the corrective surgery. A local translator was at site to help with questions.

**Results:** A total of 24 patients and families were interviewed, 19 (79%) were under 24 years of age, and 5 (21%) were above. The response was categorized into demographics, physical impairments and psychological impact. Majority of the patients were children and adolescents less than 24 years of age, with males being 63%, and females 37%. The median age among children and adolescents was 17 years, with range from 7 months to 24 years. Most were attending school, and were of low-income parents. 58% of mothers were 35 years of age and above. Majority under 24 yrs had combined defect of CL and CP (60%), the physical impairments included swallowing (42 %), speech (32%), dental (32 %), and breathing (26 %). The psychological problems under 24 yrs of age included bullying (50%), depression (33%), school performance (33%), self-image (22%), feeling isolated (22%), and self-confidence (17%).

**Discussion:** The physical impairments in children with CL/CP are well documented in other studies, but psychological impact in children and adults born with this defect has not been studied well in Latin America. We identified many physical impairments, but the high incidence of psychological issues was surprising. Our survey indicated that bullying in schools is rampant and creates a low self-esteem and low performance in school.

**Conclusion:** Children, adolescents, and adults experience a multitude of physical and psychological symptoms from cleft lip and cleft palate. It is imperative that patients get a thorough assessment for both physical and psychological issues at an earlier age. They need support and psychotherapy on a long-term basis to regain their self-image, and confidence. We recommend that psychological assessment should become a routine practice for these patients, and also in future research.

### Biography

Narainsai K Reddy is a 11<sup>th</sup> grader attending Bellaire High School from Houston, Texas, USA. He has been involved in cancer research at MD Anderson Cancer Center in Houston, winning the US Army and the Harris County Medical Society award. He has been awarded the Educational Scholarship to work at Christus Stehlin Foundation for Cancer Research in 2013. He presented a poster on "Obesity Educational Module-India" (OEM-I) in the 2<sup>nd</sup> International Conference on Growth & Nutrition in Barcelona, Spain.

Ernest Cronin is a board certified in both Plastic Surgery and Otolaryngology. He initiated Operation San Jose in 1983 taking a medical team to Latin America to provide plastic surgery services to children with cleft lip and palate problems. He has published 32 articles in medical journals and book chapters.

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