# TITLE

Socio-economic factors that may contribute to etiology of orofacial clefts.

### AUTHORS

Kaur Shubdeep, Mortazavi Mahsa, Kumar Geethapryia, Tolarova Marie M.

#### AFFILIATION

University of the Pacific, Arthur A. Dugoni School of Dentistry, Department of Orthodontics. San Francisco, California, USA

#### ABSTRACT

**Introduction/Context :** Association of socio-economic status (SES) with congenital anomalies and diseases has been studied for many years. Under the umbrella of SES are several factors and they vary in different parts of the world due to differences in climate, ethnicity and culture.

The purpose of this systematic review was to determine associations between various risk factors related to SES and prevalence of orofacial clefts (OFC).

**Methods:** Using keywords socio-economic status, risk factors, environmental factors, etiology, prevalence, orofacial cleft, cleft lip, cleft palate, and non-syndromic cleft lip and palate in PubMed and Google Scholar search engines, a systematic review of literature was done. The search was run with no language, place or time period restrictions.

**Results:** Our search yielded 23 articles from different countries that focused on etiology and prevalence of OFC. The reviewed studies listed various factors - illiteracy or lower educational level, high risk paternal occupations, maternal exposure to tobacco, indoor cooking smoke, alcohol use, nutritional deficiency, self-administered medications and other factors that may be directly or indirectly related to SES. While a general agreement between the studies on majority of the factors was found, there was a controversy regarding the area of residency, maternal age and weight.

**Significance/Conclusion:** The factors related to SES may contribute to etiology and increased prevalence of OFC. As many SES factors are associated directly or indirectly with prevalence of OFC, pre-pregnancy consultations in organized prevention programs may be helpful for reducing occurrence of OFC especially in high risk families.

## KEY WORDS

Socio-economic status, risk factors, environmental factors, etiology, prevalence, orofacial cleft, cleft lip, cleft palate, and non-syndromic cleft lip and palate