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Editorial

Craniofacial malformation: a need for health system orientation

Cleft lip with or without cleft palate is by far the most common craniofacial malformation in the new born [1]. Reported prevalence and other epidemiologic characteristics varies between countries and continents [2], and may depend on the method of investigation. Risk factors include ethnicity, maternal age, sex of the newborn, and environmental and lifestyle factors [3-13]. The study by Ittiwut et al. in this issue describes the epidemiology of oral clefts in a large sample from all parts of Thailand [14]. The results confirmed findings of other studies that the risk factors in Thai population include sex of the infant, maternal use of medications or nonprescribed drugs during pregnancy [6-8], and lifestyle factors such as alcohol consumption during pregnancy [10], as well as a higher prevalence in those with history of oral clefts in other family members, which suggests genetic predispositions of affected individuals.

Because both genetic, and environmental and lifestyle factors predispose embryonic development of orofacial clefts, health systems should develop strategies to reduce the burden of illnesses. These may include genetic counselling or testing of women who plan pregnancy [3-5]. In terms of lifestyle and environment, the health systems should raise awareness of physicians seeing women planning pregnancy to modify use of medications known to increase this malformation. Health systems should also be cognizant about possible folate deficiency as a potential cause of the disease, and provide food or vitamin supplements as indicated [11, 12]. The importance of abstinence from alcoholic beverages by women planning pregnancy should be highlighted [9, 10].

Orofacial clefts can be diagnosed by ultrasonography 12 weeks after gestation, particularly when the condition is associated with other structural anomalies [15]. The presence of orofacial clefts should prompt physicians to carefully assess other anomalies.

After delivery, the newborn should be assessed for other structural anomalies to prevent further damage. Health systems should develop a standardized process of care for the affected families including, feeding methods to avoid airway problems [16]. Surgical repair, speech, and orthodontic facilities should be developed to have the capacity for early intervention to minimize unwanted physical, developmental, and social consequences for affected individuals [16].

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