Orofacial clefts in the Middle Eastern countries – a systematic review

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Introduction: The purpose of this study was to determine the prevalence of orofacial clefts (OFC) in the Middle East. Recent studies of etiology of OFC in populations of different countries characterized by a specific cultural, religious, or socioeconomic status revealed that different environmental and genetic factors may participate in their etiology.

Methods: A systematic review of literature was done using three search engines (PubMed, Scorpius, Google Scholar) and keywords: cleft, cleft lip, cleft lip and palate, cleft palate, orofacial cleft, prevalence, incidence, Middle East and all Middle Eastern countries (Bahrain, Cyprus, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Northern Cyprus, Oman, Palestine, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, Yemen). The search was run with no language restrictions and covered the 1980 – 2017 time periods.

Results: The search yielded 27 articles. Out of them, 25 articles matched the inclusion criteria (11: Iran, 3: Saudi Arabia, 2: Jordan, Oman, Israel, 1: Bahrain, Egypt, Iraq, Palestine and UAE). No data were obtained for the remaining eight countries. The prevalence of cleft lip and/or palate reported in these studies varied greatly from 0.3 to 2.4 per 1000 live births.

Conclusion: Widely different values of OFC prevalence in the Middle Eastern countries, or even between different cities of the same country, were reported. It may be due to different methods of ascertainment and also differences in combinations of genetic and environmental factors in specific locations. Thus studies in the Middle Eastern countries focusing on etiological factors are needed for more accurate determination of OFC prevalence.

Key words: cleft, cleft lip, cleft lip and palate, cleft palate, orofacial cleft, prevalence, incidence, Middle East, Middle Eastern countries