Distribution of malocclusions in Middle East countries: A Systematic review.

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Introduction. High prevalence, multifactorial etiology and the effect on the esthetic, function and quality of life, make the malocclusions as a subject of debate for many years. Regarding the important role of malocclusion in treatment approaches, policy making in health organizations and understanding the etiology factors, this literature review was performed with the purpose of determining the prevalence and distribution of malocclusion in region of the Middle East.

Method. A systematic review of literature was done using four search engines (PubMed, Scorpius, Google Scholar, Science Direct) and keywords: malocclusion, Angle classification, Molar relationship, Class I, Class II, Class III, prevalence, incidence, distribution, Middle East and all Middle Eastern countries. The search was run with no language restrictions and covered the 1980 – 2018 time periods.

Results. Using relevant keywords, 24 articles matched the inclusion criteria (7: Iran, 4: Saudi Arabia and Turkey each, 2: Israel, 1: Egypt, Iraq, Jordan, Kuwait, Lebanon, Qatar and Syria). No data were obtained for the remaining seven countries. The prevalence of malocclusion regarding Angle molar classification varied greatly from 3.5 to 40.3 for Class I Normal occlusion, 30 to 76.9 for Class I malocclusion, 7.12 to 44.7 and 1.3 to 17.6 for Class II, and Class III malocclusions, respectively. Most of the articles showed no significant difference between genders.

Conclusions. Different methods of ascertainment, sample source, age of the target population and variety in genetic and environmental factors can be the source of widely different values related to both prevalence and distribution of malocclusion in Middle East countries.

Keywords. malocclusion, Angle classification, molar relationship, Class I, Class II, Class III, prevalence, incidence, distribution, Middle East countries.