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Qualitative analysis of the prevalence studies on temporomandibular disorders using a new instrument.

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The aim of this thesis was to elucidate the field of published articles about the prevalence of not so common disorders with heterogeneous examination and diagnostic protocols and mainly the TMD. A new quality assessment instrument, based on strict epidemiologic criteria, was developed and consequently applied to the studies on prevalence of TMD published until the year 2006. The statistical analysis showed that the newly developed instrument is reliable and that the sound heterogeneity of the TMD prevalence studies does not allow direct comparison of the studies' results. According to the data collected after exhausting literature search, the prevalence of orofacial pain fluctuated strongly between 2.24% (for African samples) and 31.15% (for South American samples). The prevalence of myofascial pain symptoms fluctuated either between 7.78% (samples from Asia) and 34.02% (South American samples), whereas the mean prevalence of myofascial pain signs fluctuated between 20.67% (African samples) and 40.58% (South American samples). For TMJ-related symptoms the prevalence was found to lie between 8.42% (European samples) and 18.89% (North American samples). The mean prevalence of TMJ-related signs appeared more stable across different samples fluctuating between 11.93% (African samples) and 17.81% (Oceanian samples). The mean prevalence of TMJ sounds report was found to lie between 1.55% (Oceanian samples) and 27.83% (North American samples), whereas the mean prevalence for objective TMJ sounds was found to fluctuate between 19.03% (African samples) and 46.69% (South American samples). The individual characteristics of the studies' subgroups were also presented descriptively in detail. Most of the studies referred to populations from developed countries. The use of the newly developed instrument may be extended to other similar medical fields and thus contribute to improving and understanding better the quality features of the prevalence studies.