Abstract

Introduction: Mouth breathing leads to negative consequences on quality of life, especially in school-age children. Objective: To determine whether the breathing pattern influences children's learning process. Methods: This systematic review was carried out according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) instructions, with no restrictions regarding the year of publication and language, created based on the clinical question formulation according to the Problem/Patient/Population, Intervention/Indicator, Comparison, Outcome (PICO) strategy: “Is the mouth-breathing child more likely to have learning disabilities when compared to nasal breathers?” in the SciELO, PubMed, LILACS, and Scopus electronic databases. Google Scholar was used to search the gray literature. The keywords “learning,” “mouth breathing,” and their equivalent terms in Portuguese were used in an integrated manner. The studies included in the review were observational, conducted with schoolchildren aged 7---11 years. Afterwards, the studies were evaluated regarding their methodological quality. The research was performed by two eligible reviewers. Results: A total of 357 records were obtained, of which 43 records were duplicate. After applying the eligibility criteria, ten articles were included in the research scope. Half of the studies used a control group and otorhinolaryngological assessment, whereas a minority used validated (20%) and sample calculation protocols (10%). The evaluation procedures were varied. Overall, 80% of the articles showed a higher incidence of learning disabilities among mouth breathers.

Keywords
Mouth breathing, Learning, Reading, Writing, Mathematics.