

INTISARI

Ortodonti menjadi salah satu pilihan perawatan manajemen *obstructive sleep apnea* (OSA); suatu kondisi yang menyebabkan tidur terfragmentasi. Prevalensi OSA di Asia berkisar antara 3,7-97,3% dengan berbagai faktor risiko, sedangkan pasien dengan OSA disertai depresi tinggi memiliki kualitas hidup yang paling rendah. *Mandibular advancement device* (MAD) muncul sebagai terapi alternatif utama untuk OSA. Efikasi adalah sejauh mana intervensi yang diberikan di bawah kondisi ideal atau terkontrol lebih baik daripada bahaya yang ditimbulkan tanpa intervensi. Sementara itu, tujuan ideal dari suatu perawatan untuk meningkatkan kualitas hidup dan harapan hidup. Kualitas hidup terkait kesehatan (*Health-related quality of life*) semakin diakui sebagai komponen penting dalam menilai morbiditas terkait dengan OSA. *Narrative review* ini ditujukan untuk mendeskripsikan secara sistematis mengenai efikasi *mandibular advancement devices* terhadap kualitas hidup pasien berdasarkan domain parameter *The Medical Outcome Study Short-Form Health Survey* (SF-36) dan *Functional Outcomes of Sleep Questionnaire* (FOSQ).

Pencarian literatur para *narrative review* ini menggunakan *database* PubMed, Science Direct, SAGE, Wiley, dan Google Scholar dengan kriteria inklusi yaitu artikel hasil penelitian, jurnal kasus, jurnal *review*, *textbook* ilmiah, literatur yang diterbitkan pada tahun 2011-2022, jurnal internasional bereputasi tingkat Quartile Q1-Q4, serta jurnal nasional terakreditasi kategori SINTA S1-S2. Kriteria eksklusi berupa artikel hasil penelitian yang tidak disertai dengan metode penelitian dan artikel yang tidak dapat diakses secara utuh. Total literatur yang di-*review* sebanyak 20 literatur.

Berdasarkan *review* yang telah dilakukan, didapatkan MAD terbukti dapat memperbaiki kualitas hidup pasien dengan OSA secara signifikan baik pada kesehatan secara umum berdasarkan parameter SF-36 dan secara khusus berdasarkan parameter FOSQ. Desain MAD monoblok maupun biblok mampu meningkatkan kualitas hidup pasien secara signifikan. *Mandibular advancement devices* merupakan terapi pilihan untuk pasien OSA yang tidak toleran dengan *continuous positive airway pressure* karena menghasilkan perbaikan kualitas hidup yang tidak berbeda secara signifikan.

Kata kunci: *Obstructive Sleep Apnea, Oral Appliances, Mandibular Advancement Devices, Quality of Life, Orthodontic*

ABSTRACT

Orthodontics is one of the treatment options for obstructive sleep apnea (OSA) management; a very common condition causes fragmented sleep. The prevalence of OSA in Asia ranges from 3.7-97.3% with various risk factors, whereas patients with OSA and high depression have the lowest quality of life. Mandibular advancement device (MAD) has emerged as a major alternative therapy for OSA. Efficacy is the degree to which an intervention administered under ideal or controlled conditions is better than the harm posed without the intervention. Meanwhile, the ideal goal of the treatment is to improve the quality of life and life expectancy. Health-related quality of life is increasingly being recognized as an important component in assessing OSA-related morbidity. This narrative review is aimed at systematically describing the efficacy of mandibular advancement devices on patients' quality of life based on the domain parameters of The Medical Outcome Study Short-Form Health Survey (SF-36) and Functional Outcomes of Sleep Questionnaire (FOSQ).

The databases used for literature searching include PubMed, Science Direct, SAGE, Wiley, and Google Scholar. The inclusion criteria were original articles, case reports, article reviews, scientific textbooks, literature published in 2011-2022, reputable international journals at the Quartile Q1-Q4 level, as well as accredited national journals in the SINTA S1-S2 category. The exclusion criteria are research articles that are not accompanied by research methods and articles that cannot be fully accessed. A total of 20 literatures were discussed in this narrative review.

It was found that MAD were proven to significantly improve the quality of life of patients with OSA both in general health based on the SF-36 parameter and specifically based on the FOSQ parameter. The design of mandibular advancement devices, both monoblock, and biblock can significantly improve the patient's quality of life. Mandibular advancement devices can be used as an alternative for OSA patients who are intolerant of continuous positive airway pressure because they produce improvements in quality of life that are not significantly different.

Keywords: Obstructive Sleep Apnea, Oral Appliances, Mandibular Advancement Devices, Quality of Life, Orthodonti