

Evidence-based strategies for interdental cleaning: A practical decision tree with literature review

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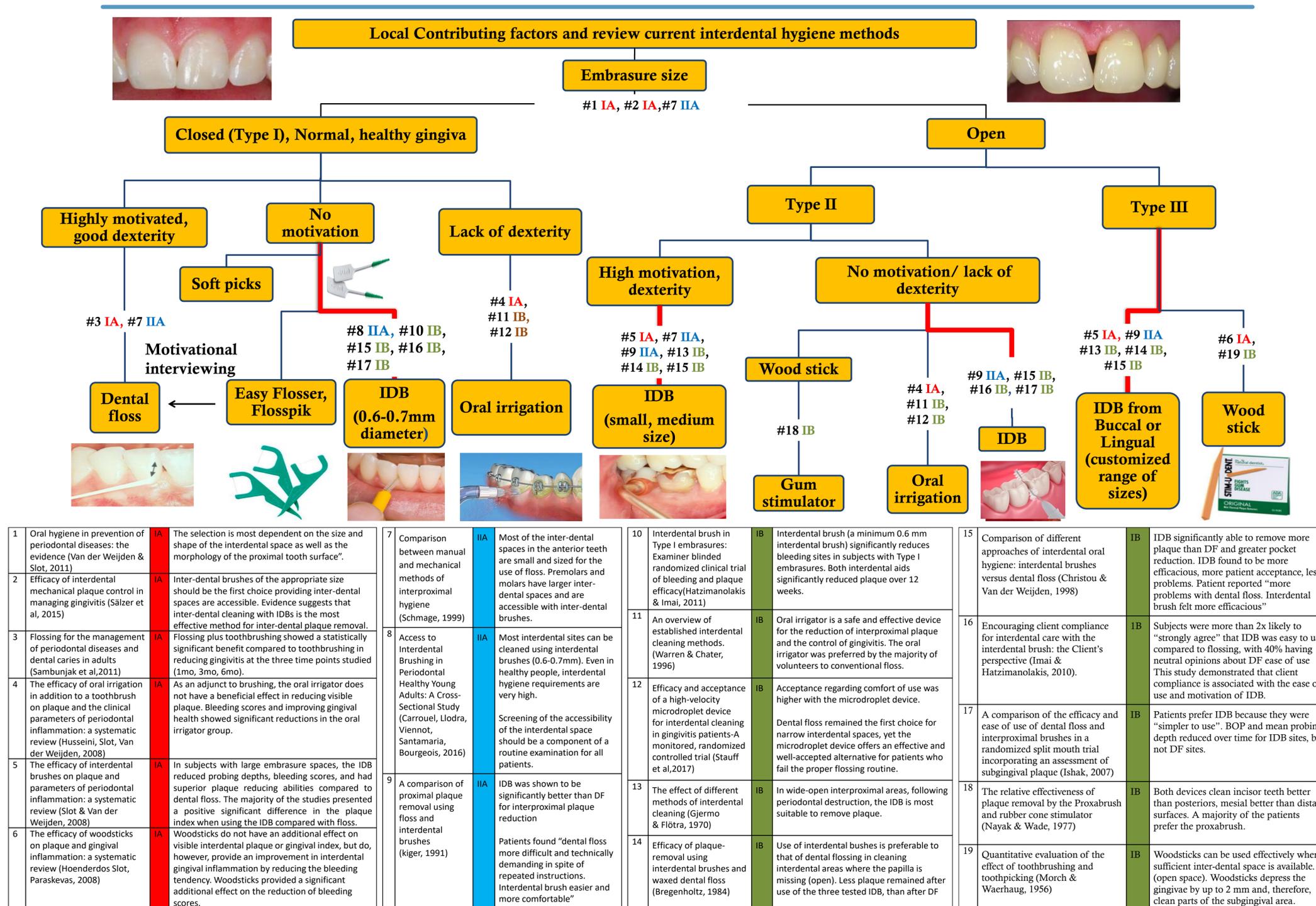
ABSTRACT

Background: Tooth brushing cannot efficiently reach the interproximal areas where periodontal disease is prevalent (1,2), and Interdental self-care with dental flossing is a common method for disrupting the oral biofilm to achieve and maintain oral health. However, compliance of dental floss is low due to lack of ability and motivation (3,4). The interdental brush (IDB) has become a suitable alternative to interdental cleansing because of its ease of use and higher compliance (5,6). Although several published clinical trials and studies are conducted on the effectiveness of different interdental cleaning devices, there is a need to organize the information to facilitate clinical application towards customized recommendations.

Objectives: This literature review primarily aimed to create a consolidated decision making-tree based on best-evidenced approaches. Major factors to consider include individuals' embrasure size, motivation, compliance and personal hand dexterity.

Methods: PubMed and Cochrane Central register of controlled trial were selected in the search for papers satisfying the study purpose. A total of 24 articles were included to propose the decision tree making. The search was mainly designed to be inclusive for any study that evaluated the effectiveness and compliance of interdental brush (IDB), dental floss, oral irrigation, and woodstick in human trials.

RESULTS



DISCUSSION

- For individuals with tight interdental space, high motivation and good dexterity, dental floss remains the first choice.
- Individuals with tight interdental space but have lack of motivation and dexterity should consider using easy flosser, soft picks and small (0.6-0.7mm) IDB.
- IDB is highly recommended for all individuals with open interdental spaces in order to clean the surface efficiently from buccal or lingual.
- Future clinical studies are needed to test the proposed flowchart.

CONCLUSIONS

- Many studies on IDB have proven its effectiveness and increase in patient compliance
- Each patient should be assessed uniquely to provide evidenced-based and customized instructions.
- Clinicians and patients should consider following evidence-based clinical decision making the use of different interdental cleaning devices.

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