

# **Значењето на препораките базирани на докази во стоматологијата**

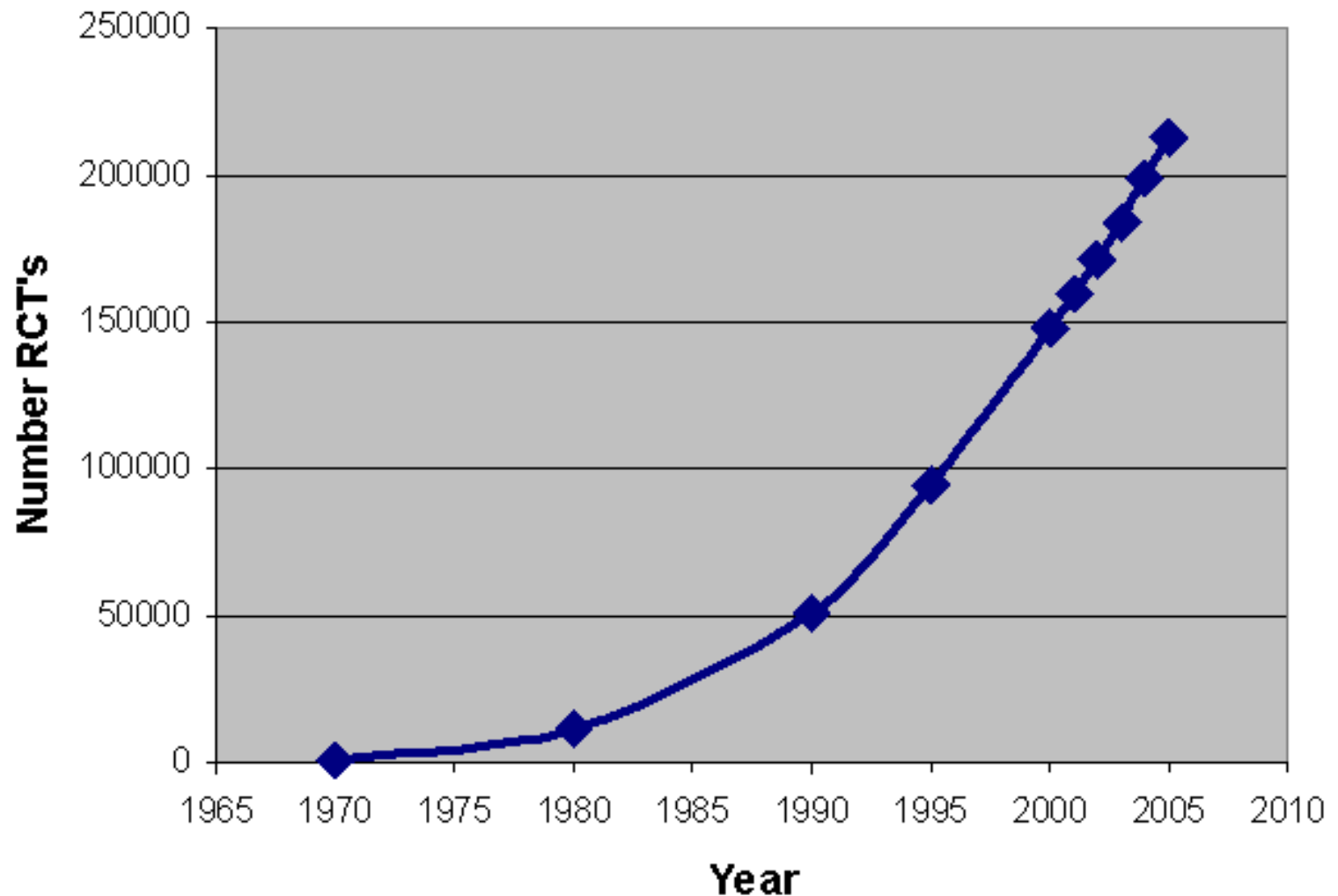
**Зисовска Е, Здравковска М**

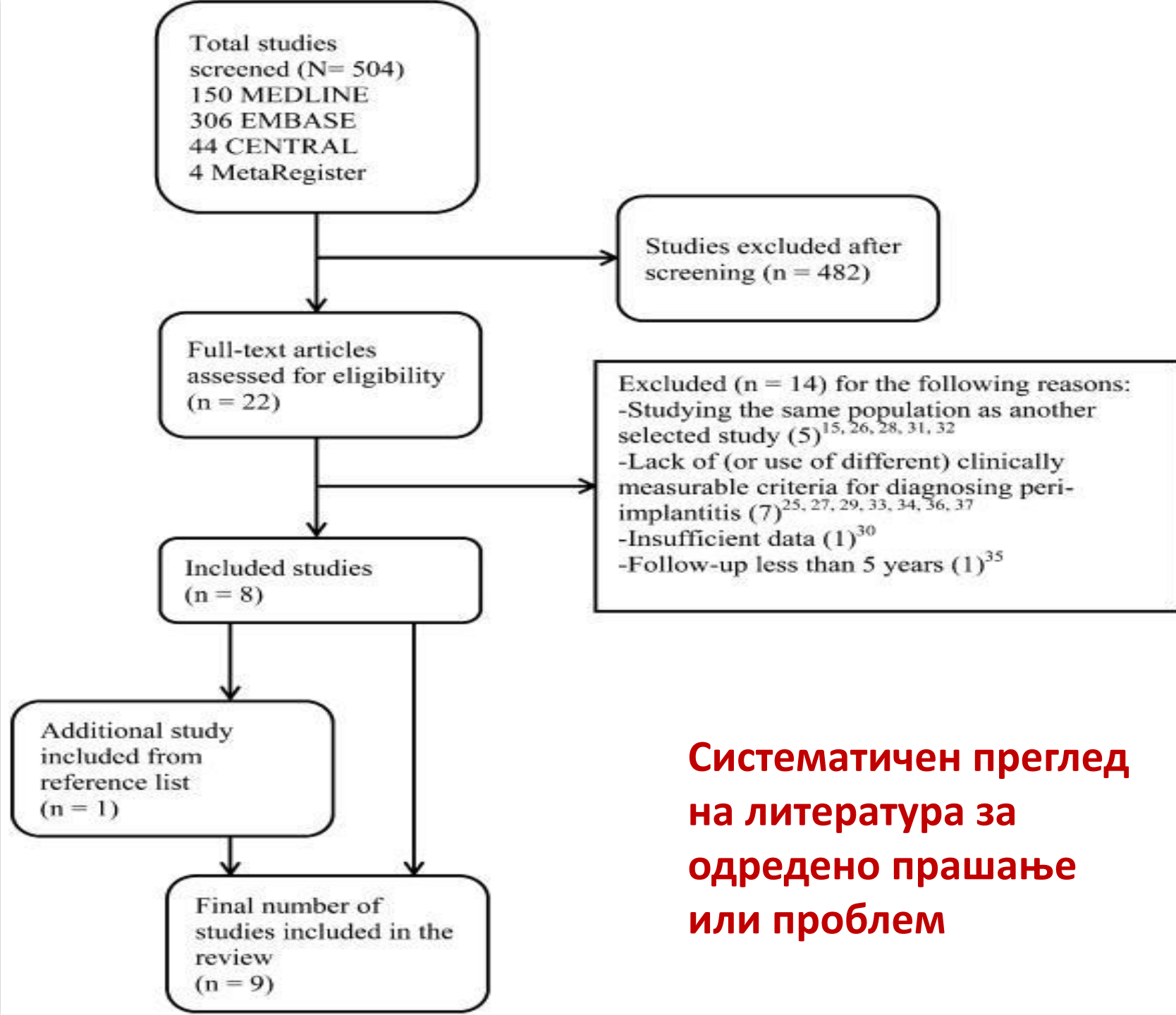
# Потреба од практикување на стоматологија базирана на докази

- Имплементацијата на препораките базирани на докази во стоматологијата е неопходна, а не само потребна;
- со развојот на медицинската и стоматолошката технологија, многу е брз продорот на информациите, па проверката на нивната точност и непристрасност би била скоро неможна;
- Стоматолозите се пред предизвикот да се справуваат со софистицираните потреби на пациентите и нивните барања.

# Справување со примарната литература

Cumulative RCT's Indexed in PubMed by Year





**Систематичен преглед  
на литература за  
одредено прашање  
или проблем**

# Зошто СБД?

Поради потребата од :

- Редукција на трошоци
  - Го зголемува притисокот на корисното наспроти рутинското и се спроведуваат најисплатливите мерки
- Приближување на истражувањето до праксата
- Искористување на литературата
- Елиминирање на маркетингот кој може да одведе во погрешен правец

# Зошто СБД?

- **MEDLINE додава 4500 записи дневно.**
- **Само во склоп на сопственото поле (специјалност), стоматологот треба да чита 19 труда дневно, 365 дена годишно, за да биде во тек со истражувањата (Oxford Center for EBM)**
- **Само ~10% од овие трудови (студии) се сметаат за високо квалитетни и клинички релевантни (Oxford)**

**СБД помага да се најде најсоодветниот труд за специфична клиничка пракса**

# Зошто СБД?

- **Справување со конфликтните резултати**

**Половина од она што се учи за време на студиите за десетина години ќе се покаже како неточно. Но проблемот е во тоа што ниту професорот, ниту студентот знаат која е таа половина. (Sydney Burwell, M.D., Dean, Harvard Medical School, 1956)**



# Зошто СБД?

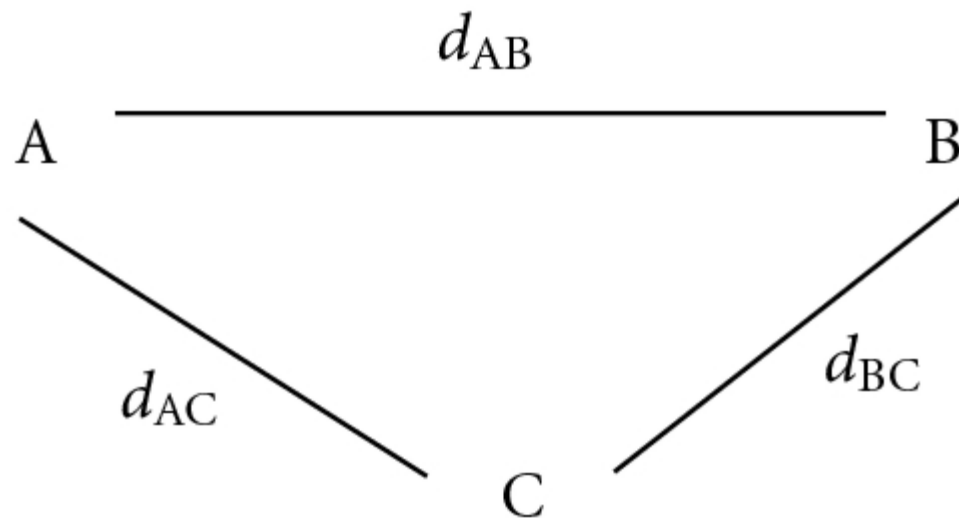
- да се формулираат и надградуваат стандардите на Клиничката практика;
- да се проверат и разјаснат контраверзните препораки и наоди, користејќи докажани статистички методи;
- да се внесат добиените препораки во Клиничките упатства кои се основа на безбедната и квалитетната здравствена заштита
- да се редуцираат варијациите во практиката;
- на државата да и се помогне да се алоцираат средствата согласно потребите;
- на фармацевтските компании да им се помогне во нивните инвестирања за подобрување на производите врз основа на проверени резултати, и нивна подобра промоција базирана на докази.



# Зошто СБД?

- Препораките базирани на докази нудат проверена алатка за да се информираат и предупредат стоматолозите за потенцијално непроверените маркетиншки активности.

# Споредба на различни методи и терапии



# Интегрирани компоненти



# Главен извор на препораки од СБД


- American Dental Association ADA
- EBD – Evidence Based Dentistry
- <http://ebd.ada.org/en/evidence/evidence-by-topic>

## Interventions for the management of temporomandibular joint osteoarthritis

de Souza, Raphael Freitas, Lovato da Silva, Claudia H., Nasser, Mona, Fedorowicz, Zbys, Al-Muharrqi, Mohammed A.. Cochrane Database of Systematic Reviews. 2012;4():CD007261

**BACKGROUND:** Osteoarthritis (OA) is the most common form of arthritis of the temporomandibular joint (TMJ), and can often lead to severe pain in the orofacial region. Management options for TMJ OA include reassurance, occlusal appliances, physical therapy, medication in addition to several surgical modalities.

**OBJECTIVES:** To investigate the effects of different surgical and non-surgical therapeutic options for the management of TMJ OA in adult patients.



**MAIN RESULTS:** Although only three RCTs were included in this review, the reports indicate a similar degree of effectiveness with intra-articular injections consisting of either sodium hyaluronate or corticosteroid preparations, and an equivalent pain reduction with diclofenac sodium as compared with occlusal splints. Glucosamine appeared to be just as effective as ibuprofen for the management of TMJ OA.

**CONCLUSIONS:** In view of the paucity of high level evidence for the effectiveness of interventions for the management of TMJ OA, small parallel group RCTs which include participants with a clear diagnosis of TMJ OA should be encouraged and especially studies evaluating some of the possible surgical interventions.

## Asthma and caries: a systematic review and meta-analysis

Alavaikko, S., Jaakkola, M. S., Tjaderhane, L., Jaakkola, J. J.. American Journal of Epidemiology. 2011;174(6):631-41

- There is inconclusive evidence suggesting a possible association of asthma with increased risk of caries. The authors conducted a systematic review and meta-analysis to synthesize the evidence on the relation between asthma and caries.
- The meta-analysis was based on 11 articles providing estimates of the effect of asthma on primary dentition and 14 articles on permanent dentition. Summary effect estimates for the relation between asthma and caries 2.73 (95% confidence interval: 1.61, 4.64) and 2.04 (95% confidence interval: 1.44, 2.89), respectively.




# заклучоци

- Factors identified as determinants of heterogeneity were geographic region for primary dentition and publication year, sample size, asthma definition, and information on the use of asthma medication for permanent dentition.
- Evidence from this analysis suggests that asthma doubles the risk of caries in both primary and permanent dentition.
- **Physicians and dentists should recommend preventive measures against caries for persons with asthma.**

## Caries-preventive effect of fluoride toothpaste: a systematic review

Twetman S, Axelsson S, Dahlgren H, Holm AK, Kallestal C, Lagerlof F, Lingstrom P, Mejare I, Nordenram G, Norlund A, Petersson LG, Soder B. Acta Odontol Scand. 2003;61(6):347-55

- The aim of this article was to report findings concerning the caries preventive effect of fluoride toothpastes in various age groups, with special emphasis on fluoride concentration and supervised versus non-supervised brushing.
- Out of 905 articles originally identified, 54 met the inclusion criteria. The results revealed strong evidence (level 1) (i) for the caries preventive effect of daily use of fluoride toothpaste compared to placebo in the young permanent dentition


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- (ii) that toothpastes with 1,500 ppm of fluoride had a superior preventive effect compared with standard dentifrices with 1,000 ppm F in the young permanent dentition
  - (iii) that higher caries reductions were recorded in studies with supervised toothbrushing compared with non-supervised.
  - However, incomplete evidence (level 4) was found regarding the effect of fluoride toothpaste in the primary dentition.
  - In conclusion, this review reinforced the importance of daily toothbrushing with fluoridated toothpastes for preventing dental caries, although long-term studies in age groups other than children and adolescents are still lacking

## Adverse drug reactions to local anesthetics: a systematic review

Liu, W., Yang, X., Li, C., Mo, A.. Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology. 2013;115(3):319-27

**OBJECTIVE:** The aim of this study was to analyze adverse drug reactions (ADRs) associated with local anesthetics (LAs) and to characterize the safety profile of LAs in clinical application.

**RESULTS:** A total of 922 articles were retrieved, and 101 of them, containing 1,645 events, were included. Among 7 death events (3.54%), 2 patients died of intravascular injection.


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- According to the meta-analysis, the risk of using LA alone was lower than combined with epinephrine.
  - **CONCLUSIONS:** The present study demonstrated that the ADRs of LAs could not be ignored, especially in oral and ophthalmologic treatments. Some ADRs could be avoided by properly evaluating the conditions of patients and correctly applying LAs.

## A systematic review of methods to diagnose oral dryness and salivary gland function


Lofgren, C. D., Wickstrom, C., Sonesson, M., Lagunas, P. T., Christersson, C.. BMC Oral Health. 2012;12():29

**BACKGROUND:** The most advocated clinical method for diagnosing salivary dysfunction is to quantitate unstimulated and stimulated whole saliva (sialometry). Since there is an expected and wide variation in salivary flow rates among individuals, the assessment of dysfunction can be difficult. The aim of this systematic review is to evaluate the quality of the evidence for the efficacy of diagnostic methods used to identify oral dryness.



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- RESULTS: The database searches resulted in 224 titles and abstracts. Of these abstracts, 80 publications were judged to meet the inclusion criteria and read in full. A total of 18 original studies were judged relevant and interpreted for this review. In all studies, the results of the test method were compared to those of a reference method.
  - Based on the interpretation it can be reported that the patient selection criteria were not clearly described and the test or reference methods were not described in sufficient detail for it to be reproduced. None of the included studies reported information on uninterpretable/intermediate results nor data on observer or instrument variation. Seven of the studies presented their results as a percentage of correct diagnoses.





**CONCLUSIONS:** The evidence for the efficacy of clinical methods to assess oral dryness is sparse and it can be stated that improved standards for the reporting of diagnostic accuracy are needed in order to assure the methodological quality of studies. There is need for effective diagnostic criteria and functional tests in order to detect those individuals with oral dryness who may require oral treatment, such as alleviation of discomfort and/or prevention of diseases.

# Development of an easily interpretable presentation format for meta-analyses in periodontal surgery

D Hauri<sup>1</sup>, PR Schmidlin<sup>1,2</sup> and MA Puhan<sup>1</sup>

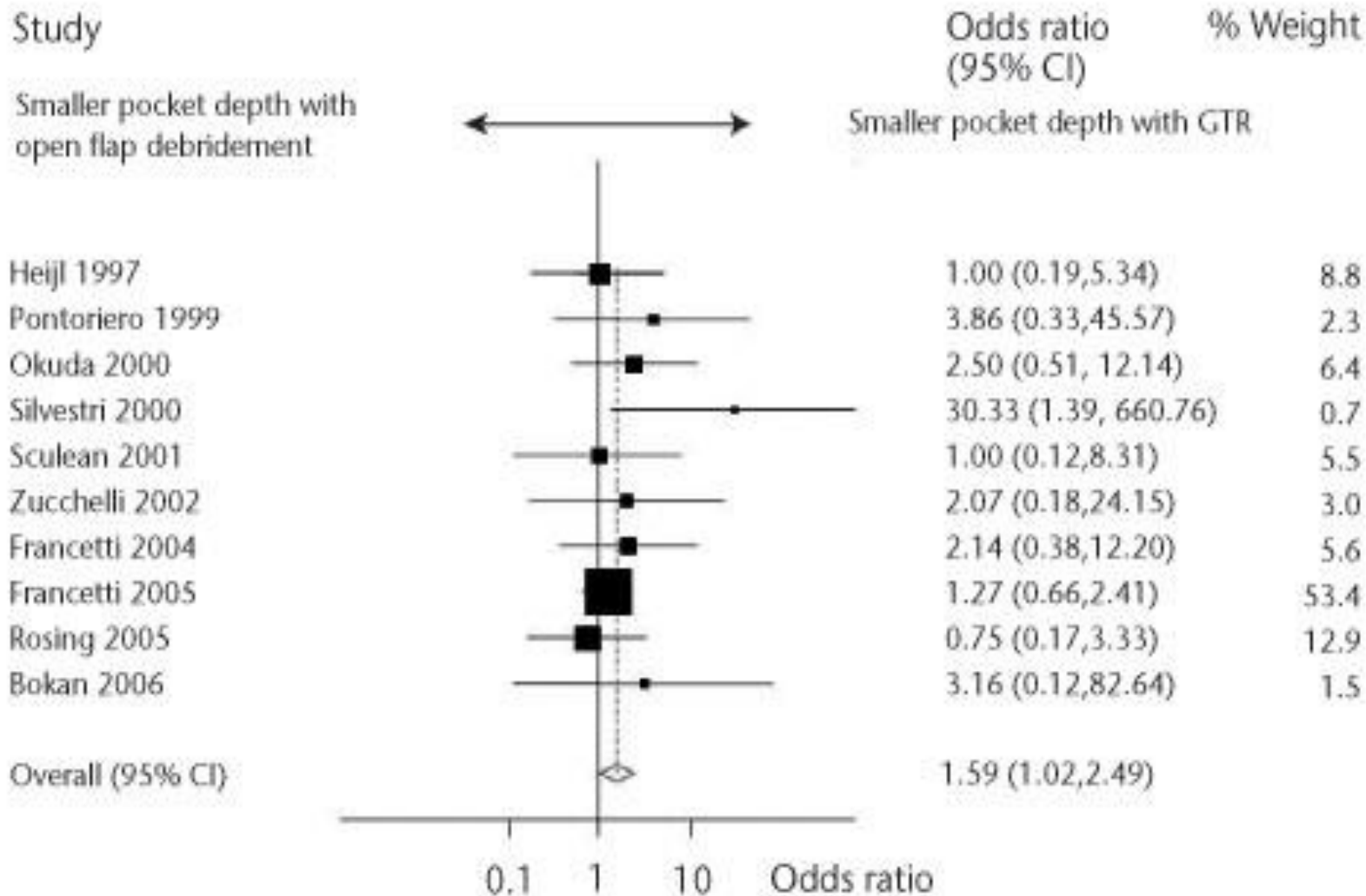
*Evidence-Based Dentistry* (2008) **9**, 89–90. doi:10.1038/sj.ebd.6400604

The comparison of two therapies is important for dentists so they can support their decisions between available treatment options. Meta-analyses already exist for the comparison of regenerative periodontal therapies. For example, guided tissue regeneration treatments (GTR) using membranes or enamel matrix derivatives have been compared with conservative open-flap debridement without membranes (referred to as standard treatment below). Treatment effects are expressed, as millimetre changes in probing pocket depth.

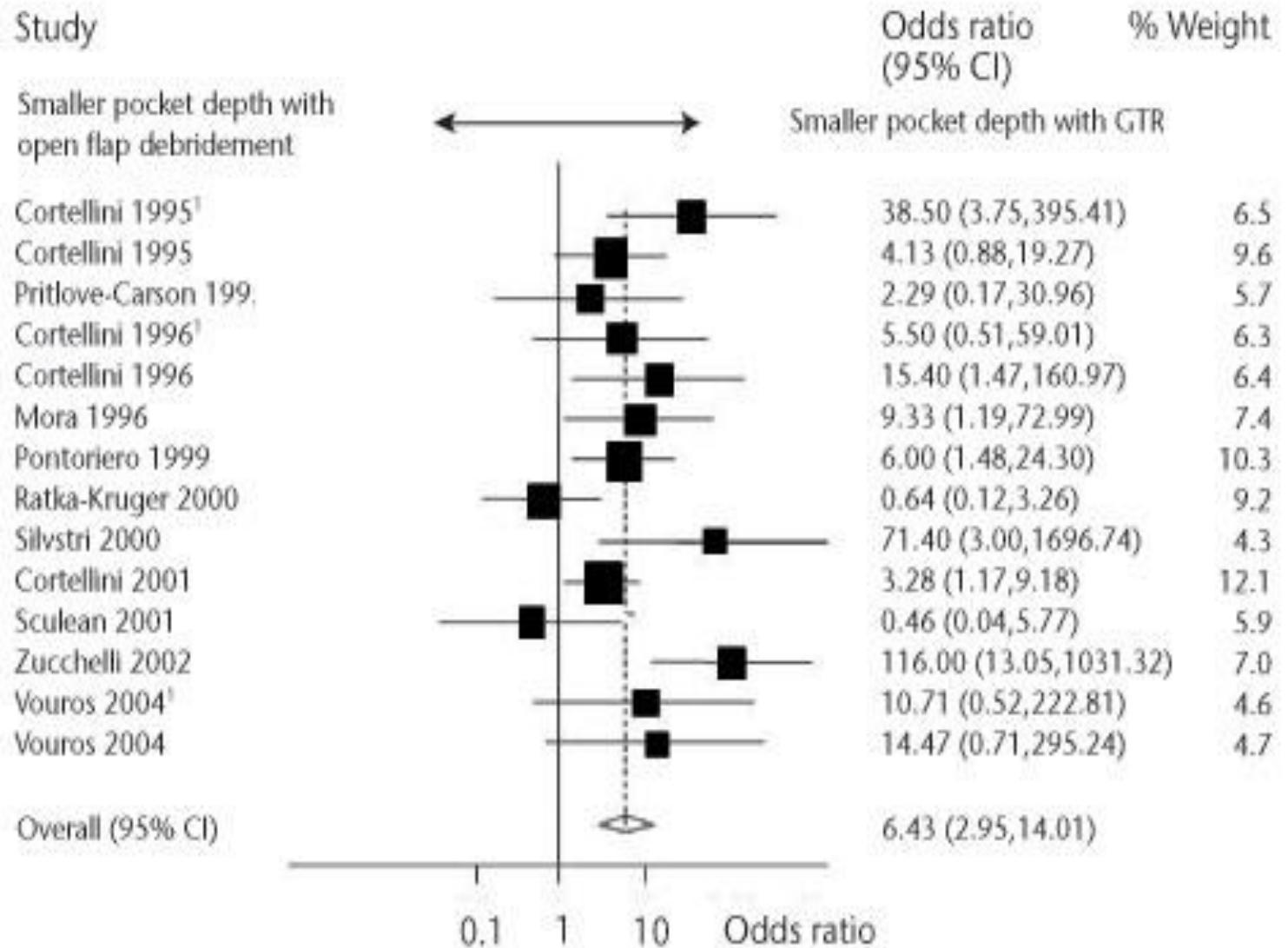
In contrast, eliminating the pockets (to  $\leq 3$  mm) would be considered a clinical success. Therefore, it would be easier to have an estimate of how more likely a clinical success is to be achieved with treatment A than with treatment B.

# Мета анализа

Cut-off 3mm: use of enamel matrix derivative



## Cut-off 3mm: guided tissue regeneration (GTR)



<sup>‡</sup> these studies contained more than one treatment group and were thus considered separately

# Заклучоци од истражувањето

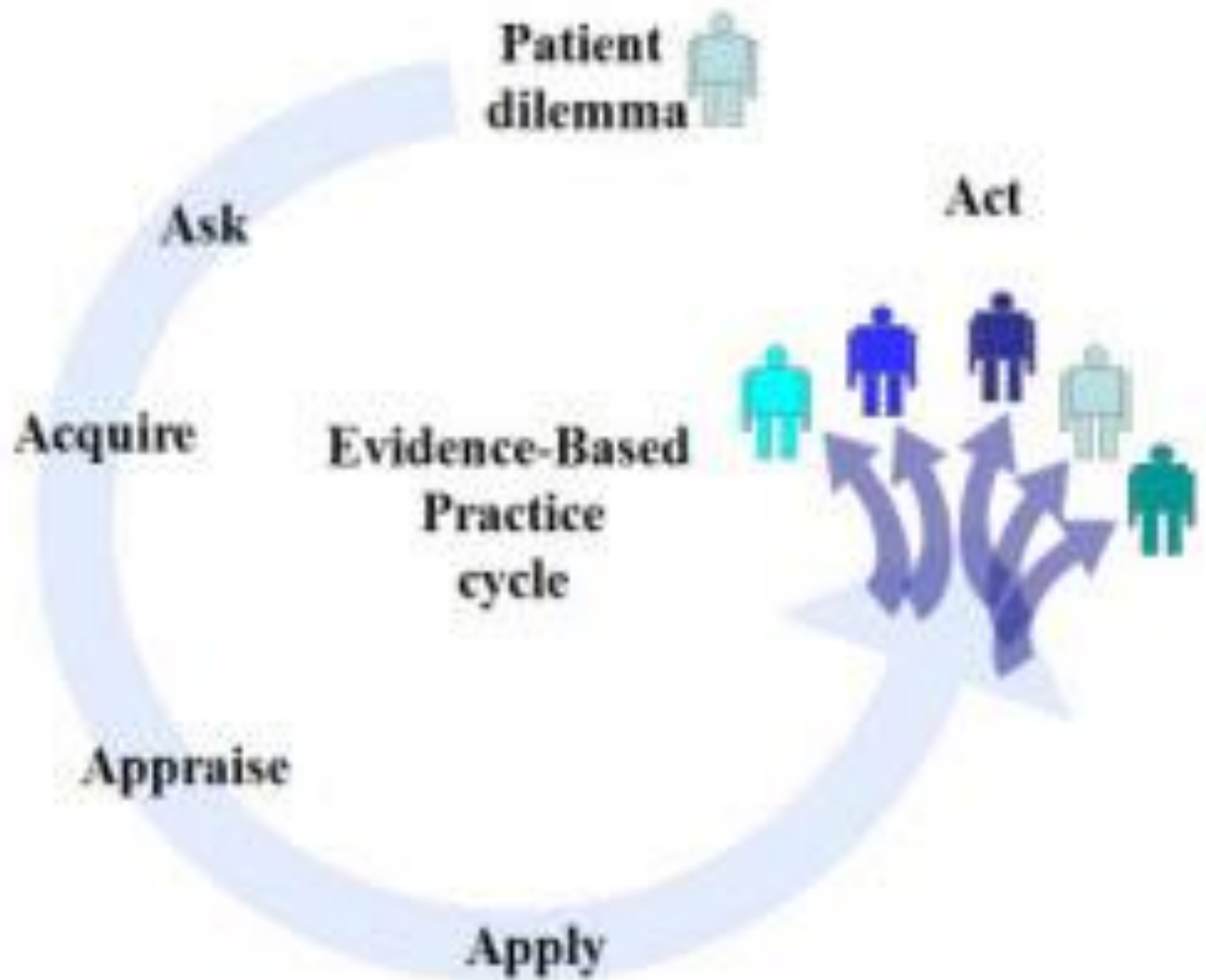
The meta-analyses showed that GTR increased the chance of clinical success about six fold compared with standard treatment, whereas enamel matrix derivatives were only slightly better than standard treatment.

This alternative of analyzing and presenting randomized trials offers a much easier interpretation than any other presentation.



# ЗАКЛУЧОЦИ

- Сите систематични прегледи кои покажуваат дека податоците не се конзистентни за да дадат високо ниво на докази, претставуваат погодно поле за понатамошно истражување
- Тоа треба да биде поттик за младите истражувачи да си најдат свои теми за истражување, чии резултати можеби ќе доведат до повисоко ниво на докази и ќе го унапредат практикувањето на стоматологија базирана на докази.





# Благодарам на вашето внимание

