



ÅRETS
KONSENSUSKONGRES
2007

IMPLANTATER OG/ELLER TÆNDER

ARRANGERET AF:
Scandinavian Society of Prosthetic
Dentistry (SSPD)

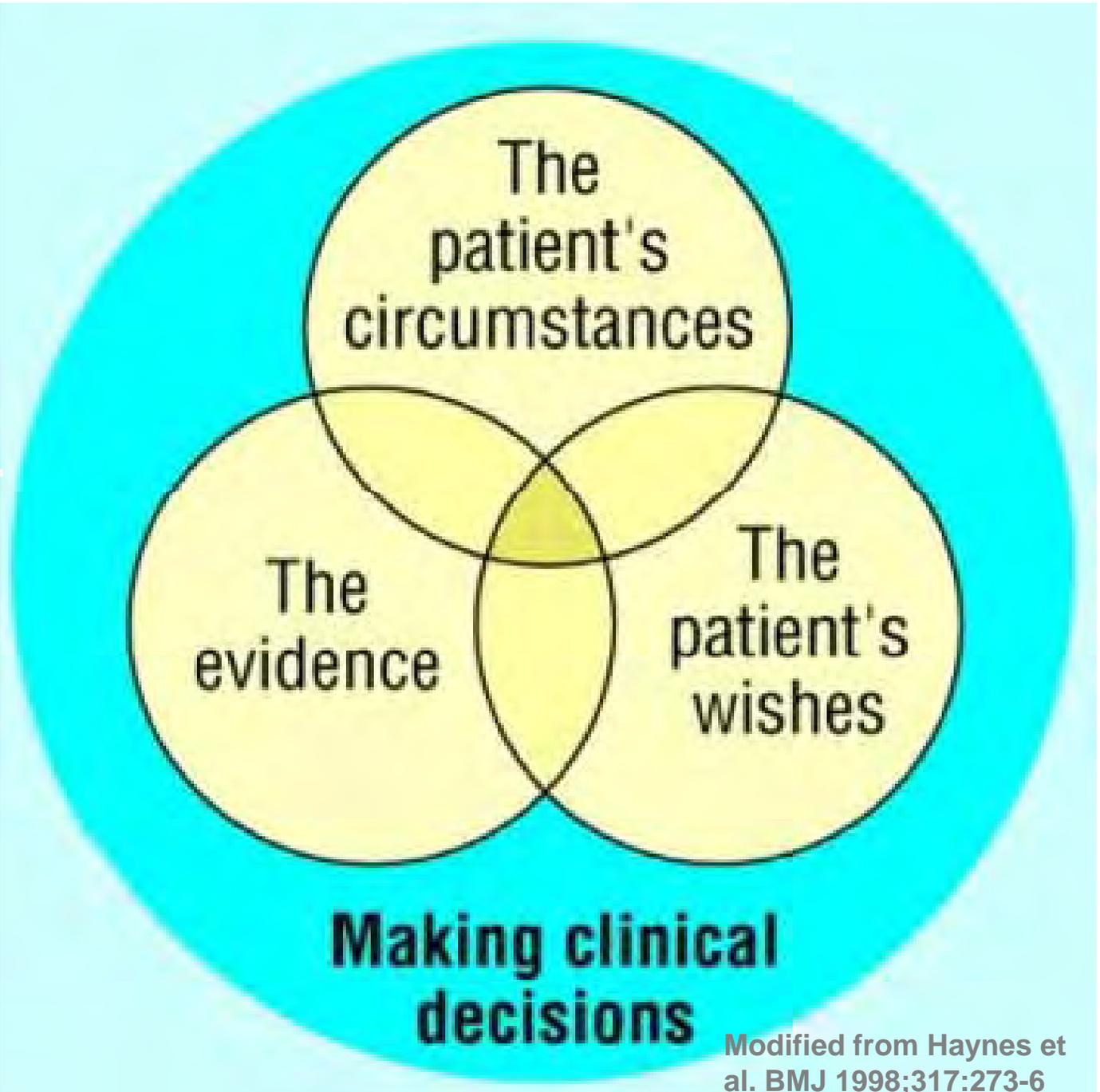
I SAMARBEJDE MED:
Dansk Selskab for Oral Implantologi
(DSOI)

How to use systematic reviews in clinical practice

Asbjørn Jokstad
Faculty of Dentistry
University of Toronto, Canada



Evidence-Based Practice:



Modified from Haynes et al. BMJ 1998;317:273-6



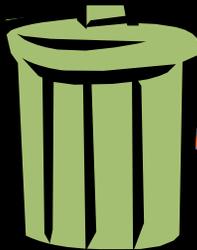
Evidence-based Practice

Recognition of need of evidence

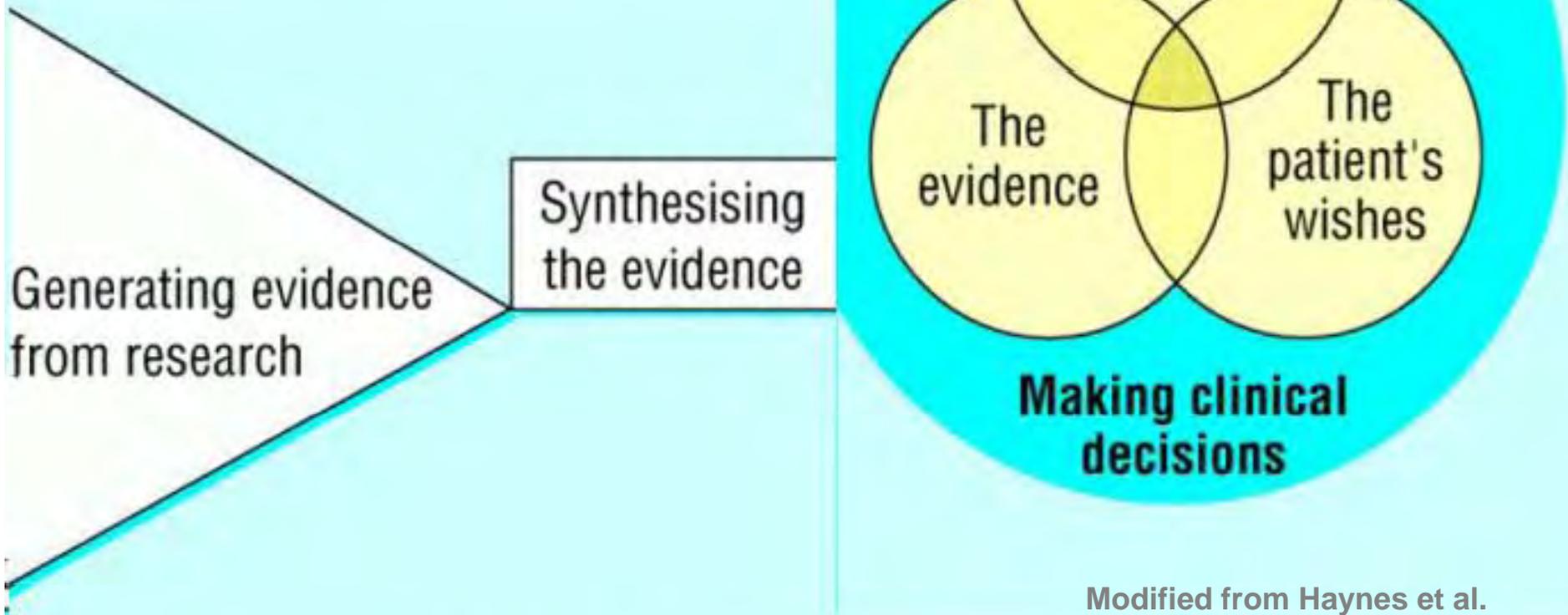
Search for Evidence

Make Sense of Evidence

Act on Evidence



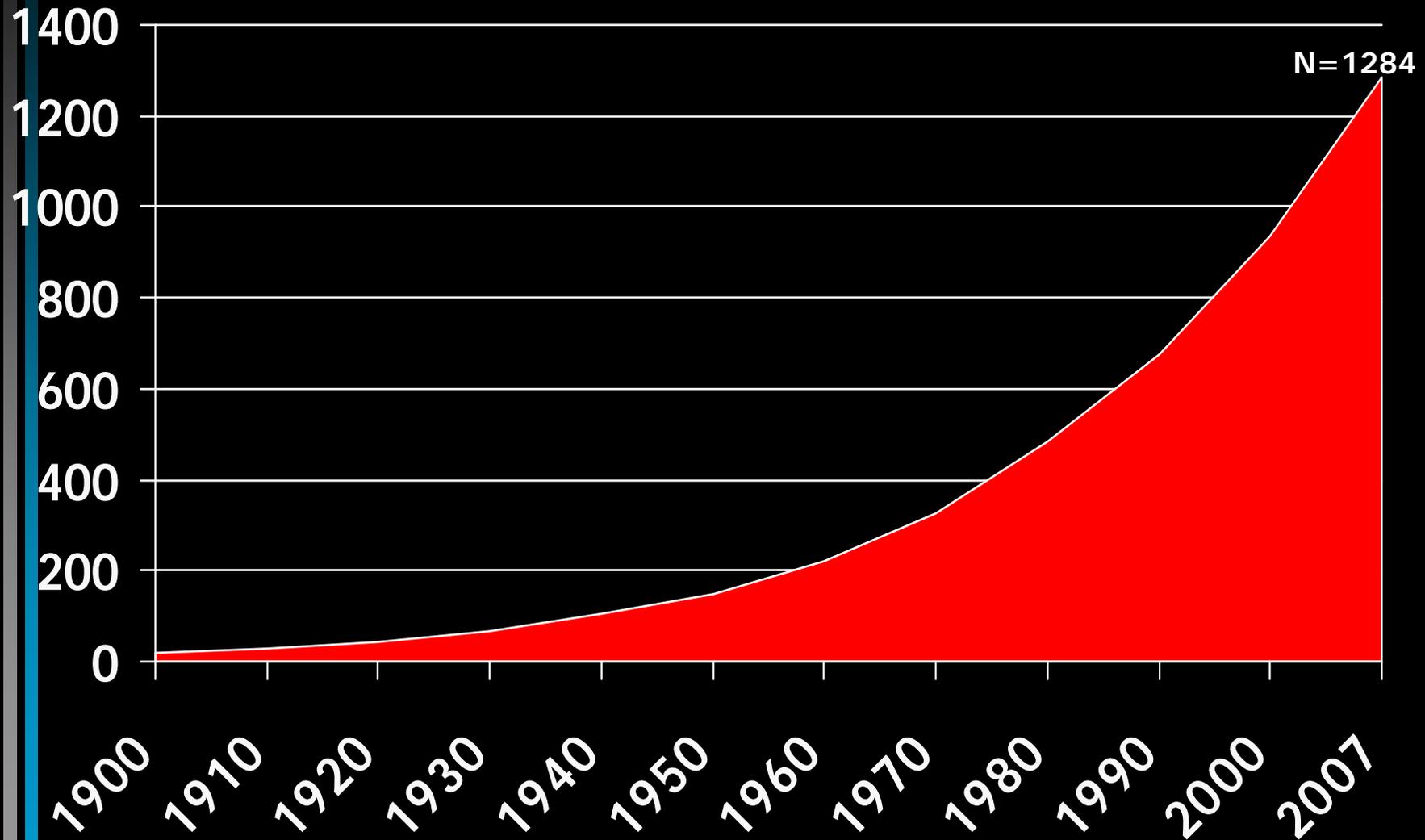
Primary research papers



Modified from Haynes et al.
BMJ 1998;317:273-6



Publications in Dentistry



Source: Ulrich's International Periodicals Directory

SSPD Consensus conference, Copenhagen, August 24, 2007



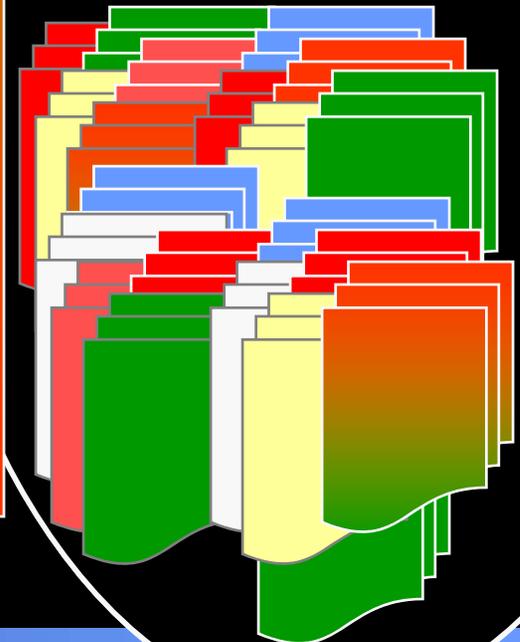
The new graduate



Advertising
- producers
- colleagues

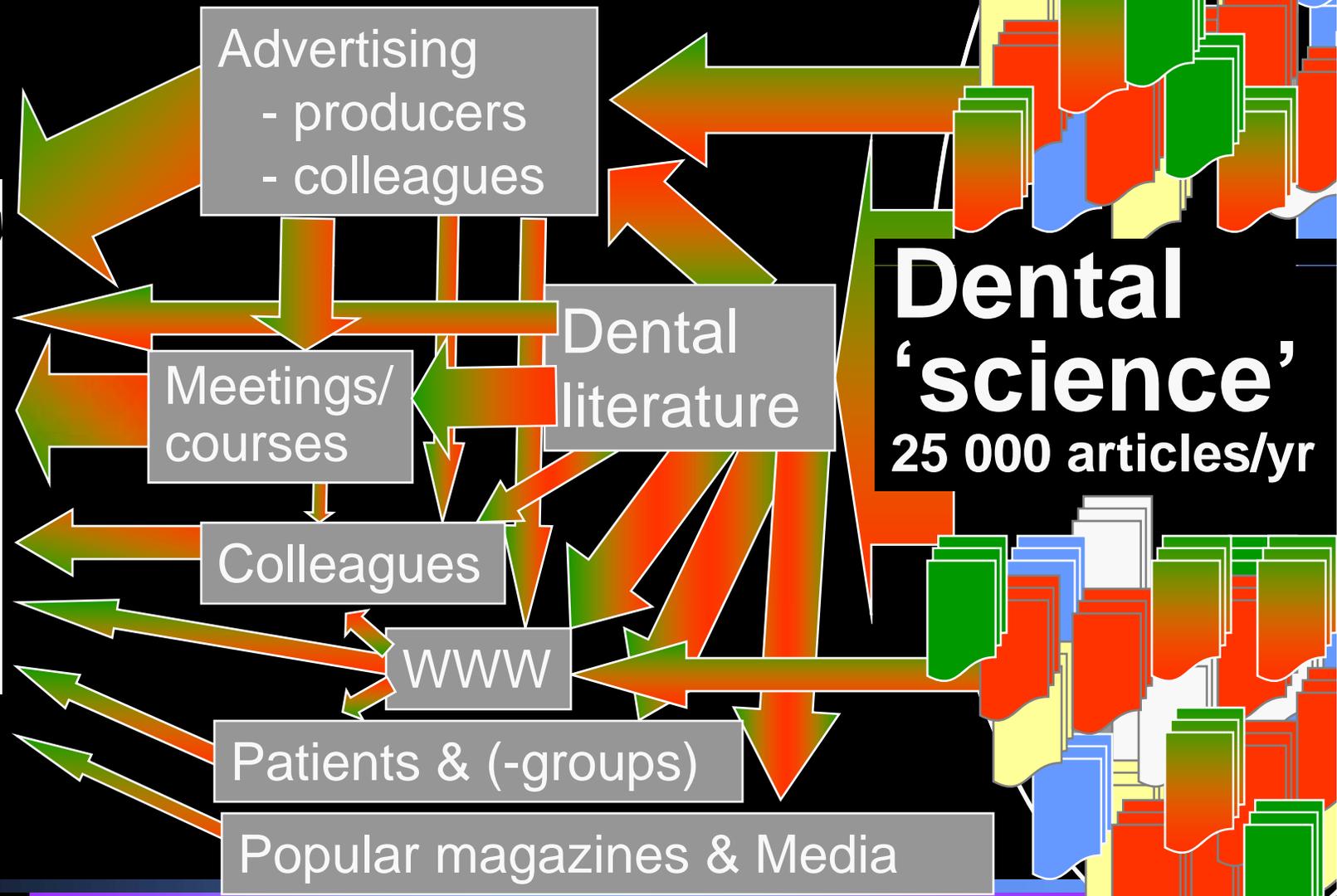
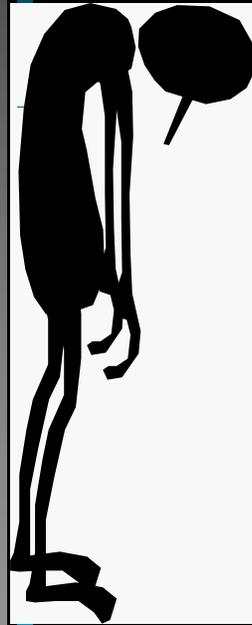
**Teacher-
filtered
"Curriculum"**

**Publications
in
dentistry**





The Information Overload

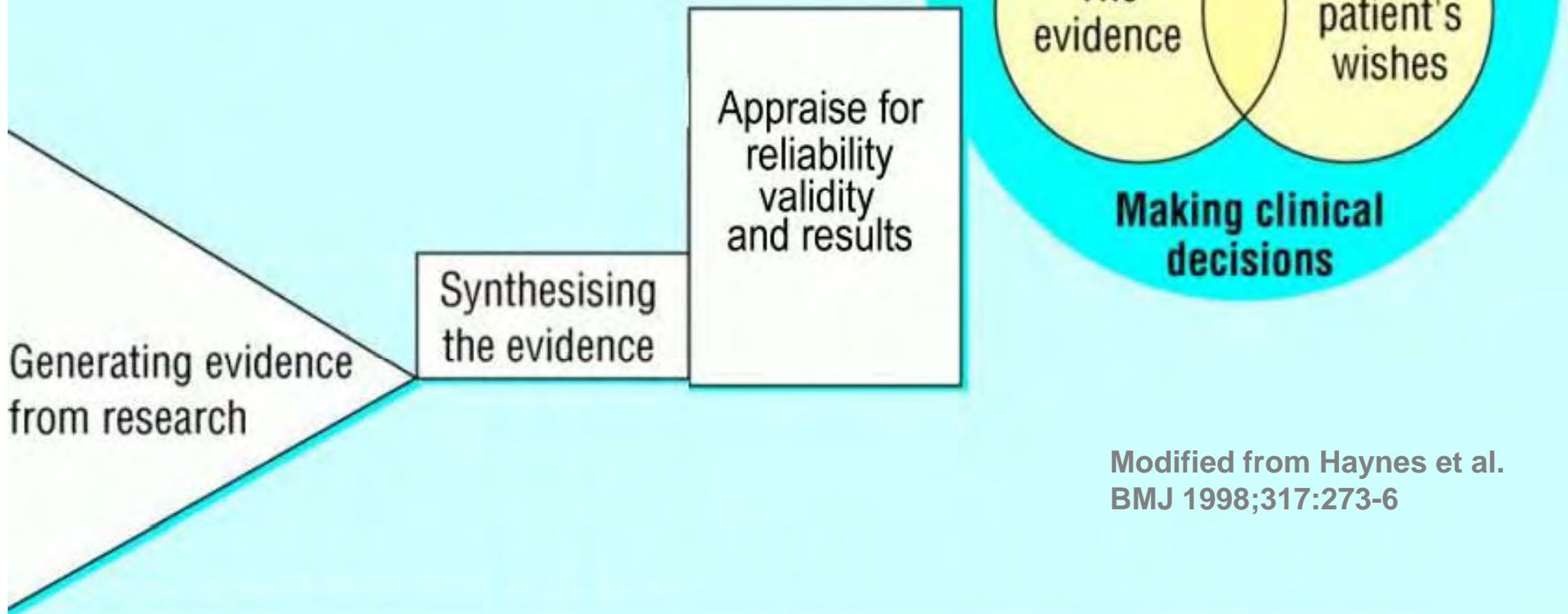




Read and use reviews – 2 reasons

1. Sheer volume of literature
2. Saves time doing exhaustive literature researches

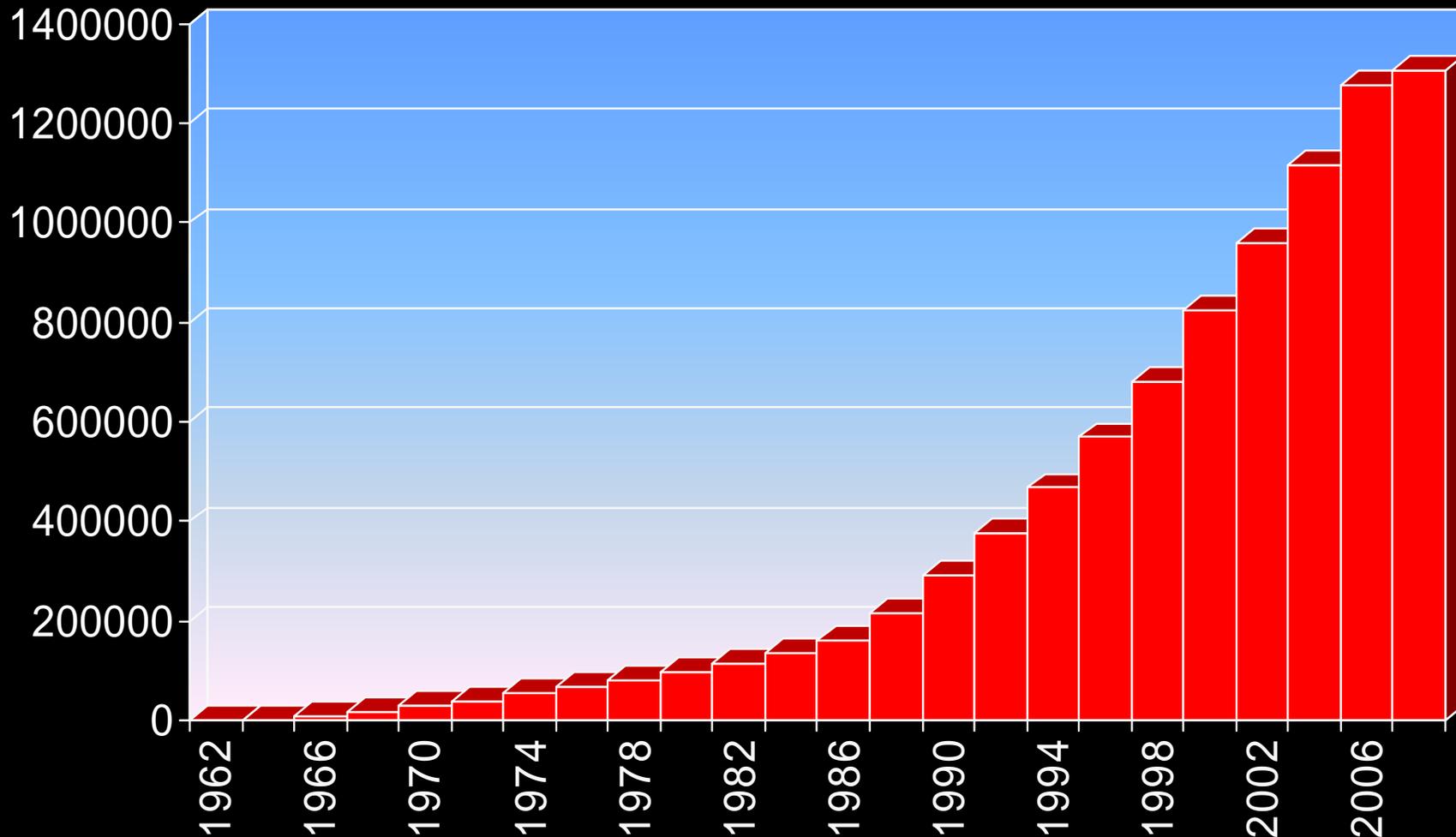
Secondary research papers



Modified from Haynes et al.
BMJ 1998;317:273-6



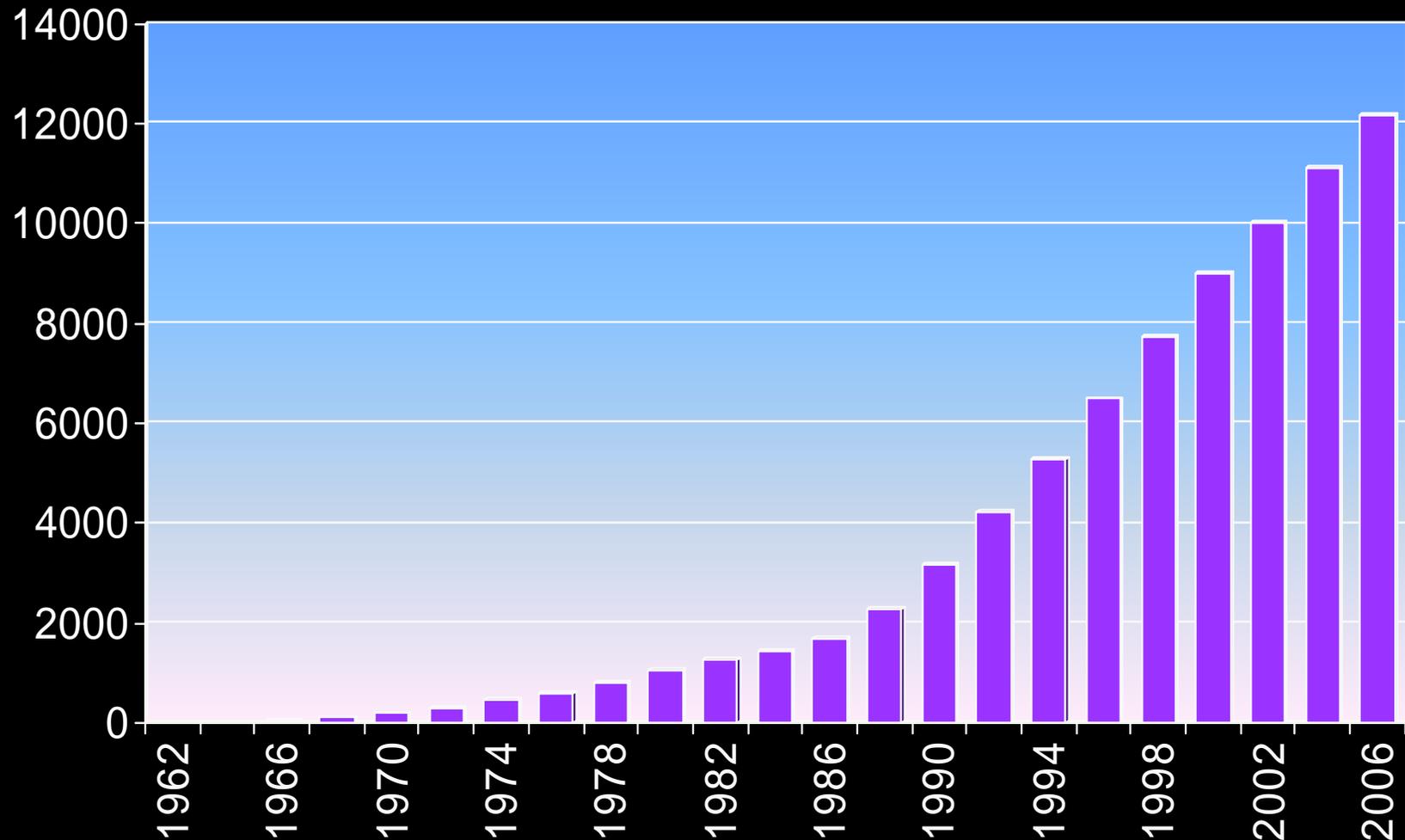
Reviews in BioMedicine (n=1 307 569)



(Source: Medline. OVID search strategy: review.pt)



Reviews in Dentistry (n=12.367) (2007: 191)



(Source: Medline. OVID search strategy: review.pt + exp dentistry)



Reviews - problems

Usually:

- written by a single topic expert
- based on their understanding of the literature
- no methodology is given
- a broad based subject is addressed
- the conclusions and advises differ



Example: Are splints an efficacious intervention for patients with TMD?



CRITICAL REVIEWS IN
ORAL BIOLOGY & MEDICINE

EMAIL
content delivery

HOME HELP FEEDBACK SUBSCRIPTIONS ARCHIVE SEARCH TABLE OF CONTENTS

Institution: UIO.ODONTOLOGISK FAKULTETSBIB. || [Sign In as Member/Individual \(Non-Member\)](#)

Critical Reviews in Oral Biology & Medicine, Vol9, 345-361, Copyright © 1998 by International & American Associations for Dental Research

ARTICLES

Oral splints: the crutches for temporomandibular disorders and bruxism?

T. T. Dao and G. J. Lavigne

Faculty of Dentistry, University of Toronto, Ontario, Canada.

Despite the extensive use of oral splints in the treatment of temporomandibular disorders (TMD) and bruxism, their mechanisms of action remain controversial. Various hypotheses have been proposed to explain their apparent efficacy (i.e., true therapeutic value), including the repositioning of condyle and/or the articular disc, reduction in the electromyographic activity of the masticatory muscles, modification of the patient's "harmful" oral behavior, and changes in the patient's occlusion. Following a comprehensive review of the literature, it is concluded that any of these theories is either poor or inconsistent, while the issue of true efficacy for oral splints remains unsettled. However, the results of a controlled clinical trial lend support to the effectiveness (i.e., the patient's appreciation of the positive changes which are perceived to have occurred during the trial) of the stabilizing splint in the control of myofascial pain. In light of the data supporting their effectiveness but not their efficacy, oral splints should be used as an adjunct for pain management rather than a definitive treatment. For sleep bruxism, it is prudent to limit their use as a habit management aid and to prevent/limit dental damage potentially induced by the disorder. Future research should study the natural history and etiologies of TMD and bruxism, so that specific treatments for these disorders can be developed.

- ▶ Similar articles found in:
[CROBM Online](#)
- ▶ Search Medline for articles by:
[Dao, T. T.](#) || [Lavigne, G. J.](#)
- ▶ [Download to Citation Manager](#)

HOME HELP FEEDBACK SUBSCRIPTIONS ARCHIVE SEARCH TABLE OF CONTENTS

IADR Journals

Advances in Dental Research ©

Journal of Dental Research ©

Critical Reviews

[Copyright © 1998 by the International & American Associations for Dental Research.](#)

199 refs



Occlusal treatments in temporomandibular disorders: a qualitative systematic review of randomized controlled trials

Heli Forssell^{a,*}, Eija Kalso^b, Pirkko Koskela^c, Raili Vehmanen^d, Pauli Puukka^e, Pentti Alanen^f

^aDepartment of Oral Diseases, Turku University Central Hospital, Lemminkäisenkatu 2, FIN-20520 Turku, Finland

^bDepartment of Anaesthesia, Helsinki University Central Hospital, Haartmaninkatu 4, FIN-00290 Helsinki, Finland

^cDepartment for Oral Health, Centre of Health and Social Services, City of Jyväskylä, Hannikaisenkatu 11-13, FIN-40100 Jyväskylä, Finland

^dHealth Center of Tampere, Satamakatu 17 B, FIN-33200 Tampere, Finland

^eSocial Insurance Institution, Research and Development Center, Peltolantie 3, FIN-20720 Turku, Finland

^fInstitute of Dentistry, University of Turku, Lemminkäisenkatu 2, FIN-20520 Turku, Finland

Received 22 January 1999; received in revised form 17 June 1999; accepted 25 June 1999

54 refs

Abstract

Occlusal treatments (occlusal splints and occlusal adjustment) are controversial but widely used treatment methods for temporomandibular disorders (TMD). To investigate whether studies are in agreement with current clinical practices, a systematic review of randomized controlled trials (RCTs) of occlusal treatment studies from the period 1966 to March 1999 was undertaken. Eighteen studies met the inclusion criteria, 14 on splint therapy, and 4 on occlusal adjustment. The trials were scored using the quality scale presented by Antczak et al., 1986a (A.A. Antczak, J. Tang, T.C. Chalmers, Quality assessment of randomized control trials in dental research. I. Methods, J. Periodontal Res. 1986a;21:305–314). The overall quality of the trials was fairly low, the mean quality score was 0.43/1.00 (range 0.12–0.78). The most obvious methodological shortcomings were inadequate blinding, small sample sizes, short follow-up times, great diversity of outcome measures and numerous control treatments, some of unknown effectiveness. Splint therapy was found superior to 3, and comparable to 12 control treatments, and superior or comparable to 4 passive controls, respectively. Occlusal adjustment was found comparable to 2 and inferior to one control treatment and comparable to passive control in one study. Because of the methodological problems, only suggestive conclusions can be drawn. The use of occlusal splints may be of some benefit in the treatment of TMD. Evidence for the use of occlusal adjustment is lacking. There is an obvious need for well designed controlled studies to analyse the current clinical practices. © 1999 International Association for the Study of Pain. Published by Elsevier Science B.V.

Cited Refer
Occlusal treatments in temporomandibular disorders: a quality
 Forssell H, Kalso E, K
 PAIN
 83 (3): 549-560 D

55 refs

12 refs appear in both papers

Cited References
Oral splints: The crutches for temporomandibul
 Dao TTT, Lavigne GJ
 CRITICAL REVIEWS IN ORAL BIOL
 9 (3): 345-361 AUG 1998

199 refs

Clear the checkbox to the left of an item if you do not want to search for articles that cite the item w

Cited Author	Cited Work	Volume	Page
<input checked="" type="checkbox"/> *NIH	ORAL SURG ORAL MED O	83	177
<input checked="" type="checkbox"/> ANTCZAK AA	J PERIODONTAL RES	21	305
<input checked="" type="checkbox"/> ANTCZAK AA	J PERIODONTAL RES	21	315
<input checked="" type="checkbox"/> ANTCZAKBOUCKOMS A	PROG PAIN RES MANAG	4	237
<input checked="" type="checkbox"/> ANTCZAKBOUCKOMS AA	J OROFAC PAIN	9	226
<input checked="" type="checkbox"/> BROOKE RI	ADV PAIN RES THER		809
<input checked="" type="checkbox"/> CHALMERS I	BRIT MED J	305	75
<input checked="" type="checkbox"/> CHALMERS TC	CONTROLLED CLIN TRIA	2	31
<input checked="" type="checkbox"/> CLARK GT	TXE OCCLUSION		271
<input checked="" type="checkbox"/> CROCKETT DJ	BIOFEEDBACK SELF-REG	11	279
<input checked="" type="checkbox"/> DAHLSTROM L	SCAND J DENT RES	90	151
<input checked="" type="checkbox"/> DAO TTT	PAIN	56	85
<input checked="" type="checkbox"/> DWORKIN SF	CLIN J PAIN	4	89
<input checked="" type="checkbox"/> DWORKIN SF	J CRANIOMANDIB DISOR	6	302
<input checked="" type="checkbox"/> DWORKIN SF	OROFACIAL PAIN TEMPO		15
<input checked="" type="checkbox"/> EKBERG E	ACTA ODONTOL SCAND	56	122
<input checked="" type="checkbox"/> FEINE JS	BRAIN ORAL FUNCTIONS		257
<input checked="" type="checkbox"/> FORSSELL H	ACTA ODONTOL SCAND	44	63

Cited Author	Cited Work	Volume	Page	Year
<input checked="" type="checkbox"/> AHLIN JH	CRANIO CLIN INT	1	65	198
<input checked="" type="checkbox"/> ALLEN JD	CRANIO	8	312	199
<input checked="" type="checkbox"/> ANDERSON GC	J PROSTHET DENT	53	392	198
<input checked="" type="checkbox"/> ANNANDALE T	LANCET	1	411	188
<input checked="" type="checkbox"/> ANTCZAKBOUCKOMS A	TEMPOROMANDIBULAR DI		237	198
<input checked="" type="checkbox"/> ATHANASIOU AE	INT J ADULT ORTHOD O	9	273	198
<input checked="" type="checkbox"/> BAILEY JO	J DENT RES	59	317	198
<input checked="" type="checkbox"/> BLASCHKE DD	J DENT RES	60	98	198
<input checked="" type="checkbox"/> BLEDSOR S	CRANIO CLIN INT	1	13	198
<input checked="" type="checkbox"/> BLOCK LS	J AM DENT ASSOC	34	253	198
<input checked="" type="checkbox"/> BRAND JW	ORAL SURG ORAL MED O	67	220	198
<input checked="" type="checkbox"/> BROOKE RI	ORAL SURG ORAL MED O	65	668	198
<input checked="" type="checkbox"/> BROWN DT	CRANIO	12	19	198
<input checked="" type="checkbox"/> CARLSON N	J PROSTHET DENT	70	39	198
<input checked="" type="checkbox"/> CARRARO JJ	J PROSTHET DENT	40	563	198
<input checked="" type="checkbox"/> CHAPMAN CE	CAN J PHYSIOL PHARM	69	704	198
<input checked="" type="checkbox"/> CHEN CW	AUST DENT J	40	71	198
<input checked="" type="checkbox"/> CHOI BH	ORAL SURG ORAL MED O	78	301	198



SRs can show:

A review being published in a highly reputable journal does not necessarily mean it can't be biased



Therefore, the
reviews should be
"Systematic"

for

[Limits](#) [Preview/Index](#) [History](#) [Clipboard](#) [Details](#)

[About Entrez](#)
[Text Version](#)

Entrez PubMed

[Overview](#)
[Help | FAQ](#)
[Tutorial](#)
[New/Noteworthy](#)
[E-Utilities](#)

PubMed Services

[Journal Browser](#)
[MeSH Browser](#)
[Single Citation Matcher](#)
[Batch Citation Matcher](#)
[Clinical Queries](#)
[LinkOut](#)
[Cubby](#)

Related Resources

[Order Documents](#)
[NLM Gateway](#)
[TOXNET](#)
[Consumer Health](#)
[Clinical Alerts](#)
[ClinicalTrials.gov](#)
[PubMed Central](#)

[Privacy Policy](#)

Show: Items 11566-11570 of 11571 Page 2314 of 2315 Select page:

- 11566:** [Gunderson JG, Carpenter WT Jr, Strauss JS.](#)
 Borderline and schizophrenic patients: A comparative study.
 Am J Psychiatry. 1975 Dec;132(12):1257-64.
 PMID: 1200169 [PubMed - indexed for MEDLINE]
- 11567:** [Miller EH, Schneider HJ, Bronson JL, McLain D.](#)
 A new consideration in athletic injuries. The classical ballet dancer.
 Clin Orthop. 1975 Sep;(111):181-91.
 PMID: 125636 [PubMed - indexed for MEDLINE]
- 11568:** [Dusbabek F.](#)
 A systematic review of the genus Pteracarus (Acariformes: Myobiidae).
 Acarologia. 1973 Nov;15(2):240-88. No abstract available.
 PMID: 4804191 [PubMed - indexed for MEDLINE]
- 11569:** [Levy J.](#)
 Autokinetic illusion: a systematic review of theories, measures, and independent variables.
 Psychol Bull. 1972 Dec;78(6):457-74. Review. No abstract available.
 PMID: 4566651 [PubMed - indexed for MEDLINE]
- 11570:** [Bender SW, Conrad HC, Biener G.](#)
 [Screening for mucoviscidosis (cystic fibrosis-CF). Systematic review and results]
 Monatsschr Kinderheilkd. 1971 Dec;119(12):632-7. German. No abstract available.
 PMID: 5159040 [PubMed - indexed for MEDLINE]

"Systematic reviews"
appearing 1971, 1972, 1973?



"Systematic" review?

Is just a word!



"Systematic" review?

Is just a word!

5 Qualifyers are
required



5 Qualifiers required:

1. The review has to begin with a statement specifying a (clinical) question or hypothesis



5 Qualifiers required:

1. A statement specifying a question or hypothesis
2. A description of a search strategy for literature that convinces the reader that all publications/study results pertinent to the subject area have been identified
 - perhaps limited to a particular type (e.g. Random Controlled Trials (RCT))
 - from all relevant specific sources (e.g. Web bibliographic databases)



5 Qualifiers required:

1. A statement specifying a question or hypothesis
2. Search strategy that identifies all publications/study results pertinent to the subject area
 - perhaps limited to a particular type (e.g. RTCs)
 - from all relevant specific sources (e.g. bibliographic databases)
3. Valid criteria to include or exclude identified studies have been described and applied (e.g. Observation time, size, study population, outcomes...)



5 Qualifiers required:

1. A statement specifying a question or hypothesis
2. Search strategy that identifies all publications/study results pertinent to the subject area subject area have been identified.
3. Valid criteria to include or exclude identified studies have been described and applied
4. Extracted relevant data have been combined and compared
If the data cannot be combined, the strength of the evidence is assessed and used to evaluate the results



5 Qualifiers required:

1. A statement specifying a question or hypothesis
2. All publications in the subject area are appraised, perhaps limited to a particular type and from all relevant specific sources
3. Valid criteria to include or exclude identified studies have been described and applied
4. Extracted relevant data have been combined and compared
5. The conclusions are based solely on the results and/or the presence or absence of supporting evidence



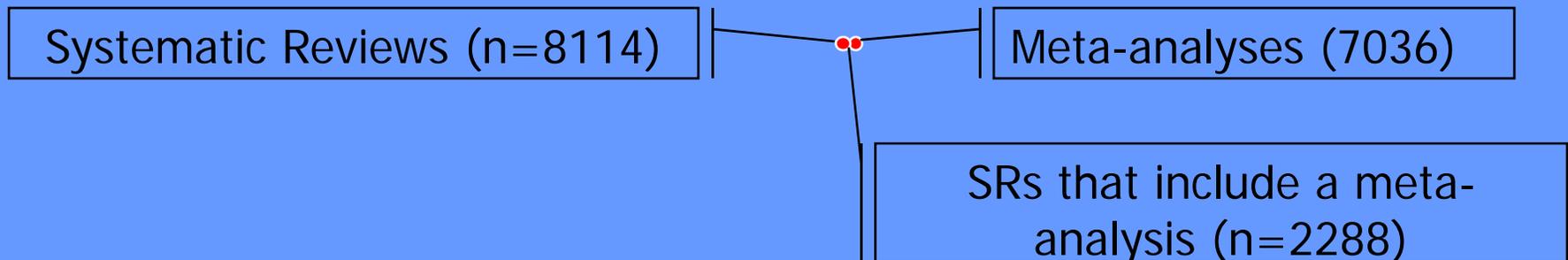
Systematic reviews are
not necessarily true or
of relevance.

But,
they should be
repeatable

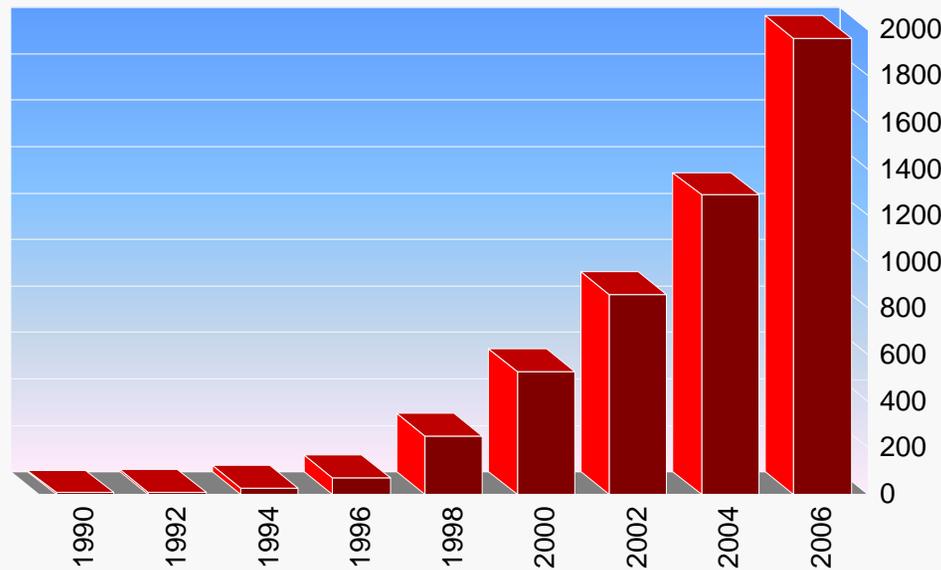


Medline Aug 2007

Reviews (n=1 307 569)



#	Search History	Results
1	systematic review.mp.	9859
2	limit 1 to yr="1990"	7
3	limit 1 to yr="1992"	11
4	limit 1 to yr="1994"	29
5	limit 1 to yr="1996"	72
6	limit 1 to yr="1998"	253
7	limit 1 to yr="2000"	530
8	limit 1 to yr="2002"	862
9	limit 1 to yr="2004"	1289
10	limit 1 to yr="2006"	1962



(Actual number
or an inflation
of the term?)



Ovid MEDLINE(R) 1950 to August Week 2 2007

[Change Database](#)

[Questions? Email ask.gerstein@utoronto.ca](#)

[Online Support](#)

#	Search History	Results
1	systematic review.mp.	9859
2	exp Dentistry/	271439
3	1 and 2	242
4	limit 3 to yr="2002 - 2007"	194
5	limit 3 to yr="1970 - 1980"	0
6	limit 3 to yr="1981 - 1990"	1
7	limit 3 to yr="1991 - 2000"	25
8	limit 3 to yr="2001 - 2005"	146
9	limit 3 to yr="2007"	23



[Combine Searches](#)



[Delete Searches](#)



[Save Search/Alert](#)



SRs in dentistry: Topics

- Pain & pharmacotherapy (n=51)
- Periodontology (n=31)
- Restorative dentistry (n=28)
- Caries (n=23)
- Fluoride issues (n=17)
- Orthodontics (n=16)
- Implant-related (n=11)
- Antibiotics, acupuncture, apnea, infection control, oral medicine, sealants, sedation, treatment decisions, toxicology, TMD...

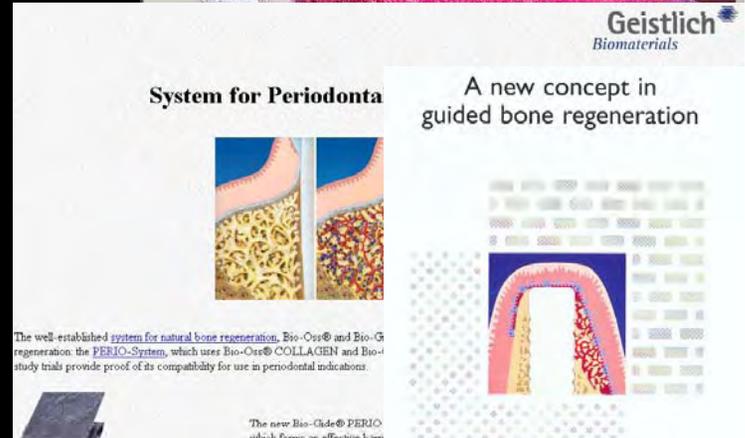
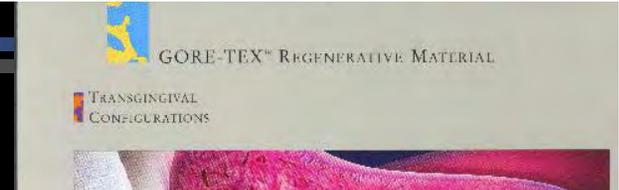


What can SRs show us?

SSPD Consensus conference, Copenhagen, August 24, 2007



Example: How effective is Guided Tissue Regeneration (GTR) for patients with localized bone loss?



Treatment of Intrabony Defects by Different Surgical Procedures. A Literature Review

Lars Laurell, Jan Gottlow, Michael Zybutz, and Rutger Persson

This article reviews studies presented during the last 20 years on the surgical treatment of intrabony defects. Treatments include open flap debridement alone (OFD); OFD plus demineralized freeze-dried bone allograft (DFDBA), freeze-dried bone allografts (FDBA), or autogenous bone; and guided tissue regeneration (GTR). The review includes only studies that presented baseline and final data on probing depths, intrabony defect depths as measured during surgery, clinical attachment level (CAL) gain, and/or bone fill. Some reports were case studies and some controlled studies comparing different treatments. In order to assess what can be accomplished in terms of pocket reduction, clinical attachment level gain, and bone fill with the various treatment modalities, data from studies of each treatment category were pooled for meta-analysis in which the data from and power of each study were weighted according to the number of defects treated. In addition, where there were data for each individual defect treated, these were used for simple regression analysis evaluating the influence of intrabony defect depth on treatment outcome in terms of CAL gain and bone fill. This was done in an effort to assess some predictability of the outcome of the various treatments. OFD alone resulted in limited pocket reduction, CAL gain averaged 1.5 mm and bone fill 1.1 mm. Bone fill, but not CAL gain, correlated significantly to the depth of the defect ($R = 0.3$; $P < 0.001$), but the regression coefficient was only 0.25. OFD plus bone graft resulted in limited pocket reduction. CAL gain and bone fill averaged 2.1 mm. Bone fill showed a somewhat stronger correlation to defect depth than following OFD alone ($R = 0.43$; $P < 0.001$) with a regression coefficient of 0.37. GTR resulted in significant pocket reduction, CAL gain of 4.2 mm, and bone fill averaging 3.2 mm. CAL gain and bone fill correlated significantly ($P < 0.001$) to defect depth ($R = 0.52$ and 0.53 respectively) with the largest regression coefficients (0.54 and 0.58 respectively) among the three treatment modalities. By comparing outcomes following the various treatments it became obvious that to benefit from GTR procedures, the intrabony defect has to be at least 4 mm deep. *J Periodontol* 1998;69:303-313.

Key Words: Bone and bones; bone regeneration; guided tissue regeneration; surgical flaps; periodontal diseases/therapy; periodontal diseases/surgery.

$$1.5 \text{ mm } \vee 4.2 \text{ mm} = 2.7 \text{ mm diff.}$$

Table 2. Controlled clinical trials comparing guided tissue regeneration procedure with access flap procedures

Authors	Type of membrane	n (guided tissue regeneration)	Guided tissue regeneration probing attachment gain±SD (mm)	n (flap)	Flap probing attachment gain±SD (mm)
Chung et al. (18)	Collagen	10	0.6±0.6	10	-0.7±0.9
Quteish & Dolby (75)	Collagen	26	3.0±1.5	26	1.8±0.9
Proestakis et al. (74)	Expanded polytetrafluoroethylene	9	1.2±2.0	9	0.6±1.0
Al-Arrayed et al. (1)	Collagen	14	3.9	14	2.7
Mattson et al. (59)	Collagen	9	2.4±2.1	9	0.4±2.1
Cortellini et al. (27)*	Expanded polytetrafluoroethylene	15	4.1±1.9	15	2.5±0.8
Cortellini et al. (27)	Titanium-reinforced expanded polytetrafluoroethylene	15	5.3±2.2	-	-
Cortellini et al. (33)*	Expanded polytetrafluoroethylene	12	5.2±1.4	12	2.3±0.8
Cortellini et al. (33)	Polymer	12	4.6±1.2	-	-
Kim (53)	Expanded polytetrafluoroethylene	19	4.0±2.1	18	2.0±1.7
Kilic (52)	Expanded polytetrafluoroethylene	10	3.7±2.0	10	2.1±2.0
Tonetti (84)	Polymer	69	3.0±1.6	67	2.2±1.5
Cortellini (19)	Polymer	23	3.0±1.7	23	1.6±1.8
Weighted mean		243	3.4±1.8	213	1.8±1.4

* Three-arm studies. Comparisons were made among two different barrier membranes and access flap.

1.8 mm v 3.4 mm = 1.6 mm diff.

GUIDED TISSUE REGENERATION FOR PERIODONTAL INFRA-BONY DEFECTS

Needleman IG, Giedrys-Leeper E, Tucker RJ, Worthington HV

• • •

Date of most recent update: 6 August 2001
Date of most recent substantive update: 20 May 1999

For attachment level change, the weighted mean difference between GTR alone and open flap debridement was 1.11 mm (95% CI: 0.63 to 1.59, chi-square for heterogeneity 31.4 (df = 9), p<0.001) and for GTR+bone substitutes was 1.25 mm (95% CI: 0.89 to 1.61, chi-square for heterogeneity 0.01 (df = 1), p=0.91). GTR showed a significant benefit when comparing the numbers of sites failing to gain 2 mm attachment, with relative risk 0.58 (95% CI: 0.38, 0.88, chi-square for heterogeneity 5.72 (df = 3), p=0.13). The number needed to treat (NNT) for GTR to achieve one extra site gaining 2 mm or more attachment over open flap debridement was 8 (95% CI: 4, 33), based on an incidence of 32% of sites in the control group failing to gain 2 mm or more of attachment. For baseline incidences in the range of the control groups of 10% and 55% the NNTs are 24 and 3.

ABSTRACT

Background

Conventional treatment of destructive periodontal (gum) disease arrests the disease but does not regain the bone support or connective tissue lost in the disease process. Guided tissue regeneration (GTR) is a surgical procedure that aims to regenerate the periodontal tissues when the disease is advanced and could overcome some of the limitations of conventional therapy.

Objectives

To assess the efficacy of GTR in the treatment of periodontal infra-bony defects measured against the current standard of surgical periodontal treatment, open flap debridement.

Search Strategy

We conducted an electronic search of the Cochrane Oral Health Group specialised trials register and MEDLINE up to October 2000. Hand searching included Journal of Periodontology, Journal of Clinical Periodontology, Journal of Periodontal Research and bibliographies of all relevant papers and review articles up to October 2000. In addition, we contacted experts/groups/companies involved in surgical research to find other trials or unpublished material or to clarify ambiguous or missing data and posted requests for data on two periodontal electronic discussion groups.

Selection Criteria

Randomised, controlled trials of at least 12 months duration comparing guided tissue regeneration (with or without graft materials) with open flap debridement for the treatment of periodontal infra-bony defects. Furcation involvements and studies specifically treating early onset diseases were excluded.

Data collection and analysis

Screening of possible studies was conducted independently by two reviewers (RT & IN) and data abstraction by three reviewers (RT, IN & EGL). The methodological quality of studies was assessed in duplicate (RT & IN) using both individual components and a quality scale (Jadad 1998) and agreement determined by Kappa scores. Methodological quality was used in sensitivity analyses to test the robustness of the conclusions. The Cochrane Oral Health Group statistical guidelines were followed (HW) and the results expressed as weighted mean differences (WMD and 95% CI) for continuous outcomes and relative risk (RR and 95% CI) for dichotomous outcomes calculated using random effects models where significant heterogeneity was detected (P < 0.1). The final analysis was conducted using STATA 6 in order to combine both parallel group studies and intra-individual (split-mouth) studies. The primary outcome measure was gain in clinical attachment. Any heterogeneity was investigated.

Main Results

We initially included 27 trial reports. Twelve were subsequently excluded. Of these, seven presented six-months data only, four were not fully randomised controlled trials, one used a non-comparable radiographic technique. Eleven studies were finally included in the review, ten testing GTR alone and two testing GTR+bone substitutes (one study had both test treatment arms).

For attachment level change, the weighted mean difference between GTR alone and open flap debridement was 1.11 mm (95% CI: 0.63 to 1.59), chi-square for heterogeneity 31.4 (df = 9), p<0.001) and for GTR+bone substitutes was 1.25 mm (95% CI: 0.89 to 1.61, chi-square for heterogeneity 0.01 (df = 1), p=0.91). GTR showed a significant benefit when comparing the numbers of sites failing to gain 2 mm attachment, with relative risk 0.58 (95% CI: 0.38, 0.88, chi-square for heterogeneity 5.72 (df = 3), p=0.13). The number needed to treat (NNT) for GTR to achieve one extra site gaining 2 mm or more attachment over open flap debridement was 8 (95% CI: 4, 33), based on an incidence of 32% of sites in the control group failing to gain 2 mm or more of attachment. For baseline incidences in the range of the control groups of 10% and 55% the NNTs are 24 and 3.



GTR attachment gain compared to open flap debridement

Laurell et al. *J Periodontol* 1998: 2.7 mm

Uncontrolled and unblinded studies

Cortellini et al. *Periodontology* 2000 2000: 1.6 mm

Unclear selection criteria for studies

Inclusion of studies of short duration

Needleman et al. *Cochrane Review* 2001: 1.1 mm

Randomised, controlled trials

Trials only comparing GTR vs flap debridement

Trials > 12 months

Furcation involvements excluded



SRs can show:

- The selection of studies to include in reviews will reflect conclusions
- The study methodology aspects will reflect conclusions
- Need to focus on studies with good methodological designs



How quickly do dentists change in accordance with new research?

Impacted wisdom teeth?

TMD management?

Restoration replacement needs?

Caries and remineralization potential

....

Science transfer to dentists seems to be ineffective

The British Association
Address http://www.nchta.org/fullmono/mon415.pdf

Health Technology Assessment 2000; Vol. 4: No. 15

Health Technology Assessment 2000; Vol. 4: No. 15
d review

http://www.sign.ac.uk/pdf/sign43.pdf - Microsoft Internet Explorer

Association of Dental Surgeons
British Association of Oral Maxillofacial Surgeons
British Association of Plastic Surgeons
Royal College of Paediatric and Child Health

Association of Dental Surgeons
Implants
Top of Page

British Association of Oral Maxillofacial Surgeons
Basal Cell Carcinoma
Top of Page

Done

Address http://www.sign.ac.uk/pdf/sign43.pdf

1 of 36 8,26 x 11,69 in

Unknown Zone

The image shows the cover of a clinical guideline. The top left features the SIGN logo, a stylized white emblem on an orange background. To its right, the text 'SIGN Publication Number 43' is displayed in orange. Below the logo, the text 'Scottish Intercollegiate Guidelines Network' is written in white on an orange background. The main title, 'Management of Unerupted and Impacted Third Molar Teeth', is centered in large orange font. Below the title, it says 'A National Clinical Guideline'. At the bottom, a green box contains a 'please note:' followed by the date '25.04.2000 14:53:06' and a paragraph of text: 'This guideline was issued in 2000 and will be reviewed in 2002 or sooner if new evidence becomes available. Any updates to the guideline in the interim period will be noted on the SIGN website. Comments are invited to assist the review process. All correspondence and requests for...'

USA

1979: NIH
Consensus dev.
Conference for
removal of third
molars

1995: Am.Acad.Oral Med.Surg.
Parameters of Care

1993: Am.Acad.Or.Med.Surg.
Workshop on the managem. of
patients with third molar teeth

1991 Am.Acad.Oral Med.Surg
Parameters of Care

2000: SIGN
Guidelines

1980

1990

2000

1995: Br. Assoc.Oral Med. Surg. Pilot Clinical Guidelines

1996: NHS R&D. National guidelines

Sept 1997: FacDentSurg RoyCollSurg(Eng)

1998: Effectiveness Matters 3(2)

2000: NHS R&D HTA Programme

2000: NICE
Guidelines

SSPD Consensus conference, Copenhagen, Aug



Dentists' decisions on prophylactic removal of mandibular third molars: a 10-year follow-up study

Kerstin Knutsson¹, Leif Lysell² and Madeleine Rohlin¹

¹Department of Oral Radiology, Faculty of Odontology, Malmö University, Malmö,
²Department of Oral Surgery, Central Hospital, Kristianstad, Sweden

Knutsson K, Lysell L, Rohlin M: Dentists' decisions on prophylactic removal of mandibular third molars: a 10-year follow-up study. Community Dent Oral Epidemiol 2001; 29: 308-14. © Munksgaard, 2001

Abstract - Objectives: In recent years, several critical outcome studies concerning the prophylactic removal of mandibular third molars have been published. These

...studiesappear to motivate a more restrictive approach today compared with 10 years ago"



accepted 8 November 2000



Even if we do have SRs...

These are not necessarily known to the dental practitioners community

Who's responsibility is it to disseminate (new) research results that impacts directly on patient care?

ÅRETS
KONSENSUSKONGRES
2007

IMPLANTATER OG/ELLER TÆNDER

ARRANGERET AF:
Scandinavian Society of Prosthetic
Dentistry (SSPD)

I SAMARBEJDE MED:
Dansk Selskab for Oral Implantologi
(DSOI)



ÅRETS
KONSENSUSKONGRES
2007

IMPLANTATER OG/ELLER TÆNDER

ARRANGERET AF:
Scandinavian Society of Prosthetic
Dentistry (SSPD)

I SAMARBEJDE MED:
Dansk Selskab for Oral Implantologi
(DSOI)

E.B. - Recommendations & Guidelines

- Scottish Intercollegiate Guidelines Network
- Adopted by many government health agencies worldwide
- Grades of Recommendations:
 - grade A: based on strong evidence → grade B
→ grade C → grade D: based weak evidence



BMJ

A new system for grading recommendations in
evidence based guidelines

Robin Harbour and Juliet Miller

BMJ 2001;323:334-336
doi:10.1136/bmj.323.7308.334



IMPLANTATER OG/ELLER TÆNDER

ÅRETS

KONSENSUSKONGRES

2007

ARRANGERET AF:

Scandinavian Society of Prosthetic
Dentistry (SSPD)

I SAMARBEJDE MED:

Dansk Selskab for Oral Implantologi
(DSOI)



Thank you
for your
kind
attention