29th INDIAN PROSTHODONTIC SOCIETY CONFERENCE

23rd - 25th NOVEMBER - 2001

RAMOJI FILM CITY, HYDERABAD

Quintessence International — Official Publication

Highlights of the conference

Trade fair: A masive trade fair of 80 stalls will be in place during the conference, where it is expected that several new products will be on display and demonstration. ***Table clinics :*** On conference days, Table clinics will be held by professionals. Computer displays, Technical Manuals, Posters, Models etc will be displayed to give the first hand experience. ***Theme Dinners :*** Exciting theme dinners have been organised, on 23rd night at Sun City, where the ambience will instantly transport you to a totally different world. ***About the venue :*** The 400 year old charismatic Hyderabad has a lot to offer. The Golkonda Fort, The Charminar, The Salarjung Museum, The Monolith Buddha Statue in the tranquil lake of Hussain Sagar and the new IT landmark Hi-Tech city are just a few of the many favourite tourist spots. One can shop in the Lad bazar for bangles or look for quality Pearls or take a trip to the near-by Pochampally village to buy Pochampally sarees. The chosen venue for the in-house conference is the picturesque Ramoji film City — the most lavish & exclusive destination, and probably one of the finest in the world.

Keynote and Guest lectures

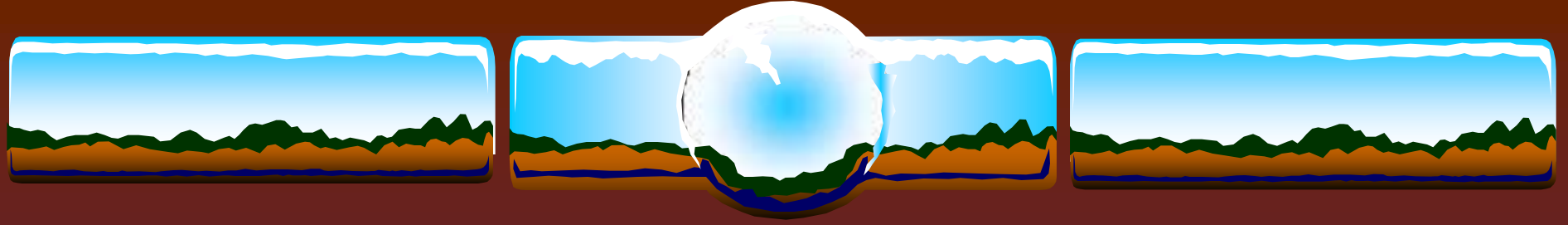
1. **Dr. Raj K Raja Rayan,** Dean of Royal college of Surgeons, London
   Subject : Fixed Partial Dentures a Modality of Treatment
2. **Dr. Zafrulla Khan,** Head of James Graham Brown Cancer Center; Louisville
   Subject : Role of Maxillofacial Prosthodontist in New Millennium
3. **Dr. Asbjorn Jokstad,** Faculty; University of Oslo
   Subject : Cost, Benefit Analysis in Prosthodontics.
4. **Dr. EGR Solomon,** Founder member of IPS Senior Teacher; Madras
   Subject : Complete Denture Harmony
5. **Dr. Chandrasekharn Nair,** Head of the Department, Ambedkar Dental College Bangalore
   Subject : Maxillofacial Prosthetics, Stress Management
6. **Dr. Firdaus S. Jafrei**, Carol Stream IL
   Subject : Full Mouth Rehabilitation Using Multiple Implant Modalities.
7. **Dr. Martin Steinbauer,** Private Practice in Sonthofen
   Subject : Telescopic Crowns and Implant Possibilities
8. **Dr. Ajit G. Shetty,** Bombay
   Subject : Laminates
9. **Dr. Dilip Deshpande,** Former Prof & Head, Nair Dental College Bombay
   Subject : Implant Occlusion & Attachments in Removable Prosthesis
10. **Dr. Sadasiva Shetty,** Dean, Bapuji Dental College; Davangere
    Subject : Prostho Ortho Relation
11. **Dr. Maj. Gen. T. Ravindranath,** New Delhi
    Subject : Implant Indian Perspective
12. **Dr. Swarajya Bharathi Sudhapalli,** Faculty in KLE Dental College, Belgaum
    Subject : Mandibular Flexure (Clinical Aspects)
13. **Dr. K. Balasubramanyam,** Director NFTDC Hyderabad
    Subject : Indignization of Dental Materials
14. **Dr. Sabita Ram,** Faculty in Govt. Dental College Bombay
    Subject : Impression Techniques in Removable Prosthetics
15. **Dr. Suhasini J Nagda,** Head of Prosthodontics, Nair Dental College Bombay
    Subject : Soft Lined Dentures
16. **Dr. Suresh Meshram,** Head of the Dept. Govt Dental College Bombay
    Subject : Partial Denture Design
17. **Dr. Mahesh Verma,** Head of Dental wing MAMC New Delhi
    Subject : Denture Bases and Advances
18. **Dr. Milind Karmarkar,** Bombay
    Subject : Hybrid Prosthesis
19. **Dr. Shavir S. Nooryezdan,** Implantologist, Bombay
    Subject : Creating the ultimate aesthetics in the single tooth implant restoration
20. **Dr.Kiran Kelkar Bombay,**
    Subject : Harmony between Lab & Clinical Practice
21. **Dr. Faber Cologne**
    Subject : Galvano Formed Copings

8 pre conference courses on 21st and 22nd November 2001 will be held at National Institute of Health and Family Welfare Vengal Rao Nagar and Hotel Green Park, Hyderabad.

1. Hinge axis registration and transfer and Gothic arch tracing and role of articlulators in Prosthodontics; Course conducted by Dr. Raj K. Raja Rayan and Dr. E.G.R. Solomon.
2. Maxillofacial Prosthesis — Silastic materials in Maxillofacial prosthetics: conducted by Dr. Zafrulla Khan
3. Clinical and laboratory procedures for ceramic laminate veneers. Conducted by Dr. T.V. Padmanabhan and Mr. Sameer
4. Prosthetic protocol of implant — transitional implants: Course conducted by Dr. Martin Stienbauer and Ajit Shetty
5. Galvano formed copings: conducted by Dr. Faber and Andreas Hubben
6. Hands on course on Metal free ceramics : conducted by Andreas Hubben
7. Hands on course on Geo waxing technique : conducted by Mr. Michael Hemmer
8. Implant loading and management of integrated implants: Course conducted by Dr. Firdaus S. Jafri and Mrs. Tracy Suart.

Conference Secretariat : Dr. K. Mahendranadh Reddy, The Dental Clinic, 36, Ground Floor, "Topaz", on amrutha Hills, 6-3-883, Punjagutta, Hyderabad - 500 082. Phone : Clinic 3411841, 3404140. Resi : 3402552, E-mail : mrkareti@eth.net

Official Publication — Quintessence International



Scientific Evidence of Research in Oral Prosthetics

Asbjørn Jokstad
Institute of Clinical Dentistry
Faculty of Dentistry, University of Oslo
Norway

Prosthetic Dentistry*

The discipline of dentistry concerned with

the consequences of congenital absence or acquired loss of oral tissues

*Jokstad A, Ørstavik J, Ramstad T. A Definition of Prosthetic Dentistry. International J Prosthodontics 1998; 11:295-301.

Prosthetic Dentistry

The discipline of dentistry concerned with the consequences of congenital absence or acquired loss of oral tissues

on appearance, stomatognathic function, comfort, and local and general health of the patient

*Jokstad A, Ørstavik J, Ramstad T. A Definition of Prosthetic Dentistry. International J Prosthodontics 1998; 11:295-301.

Prosthetic Dentistry

The discipline of dentistry concerned with the consequences of congenital absence or acquired loss of oral tissues on appearance, stomatognathic function, comfort, and local and general health of the patient,

and with the methods for, and assessment if more good than harm is done by, inserting artificial devices made from alloplastic materials to change these conditions.





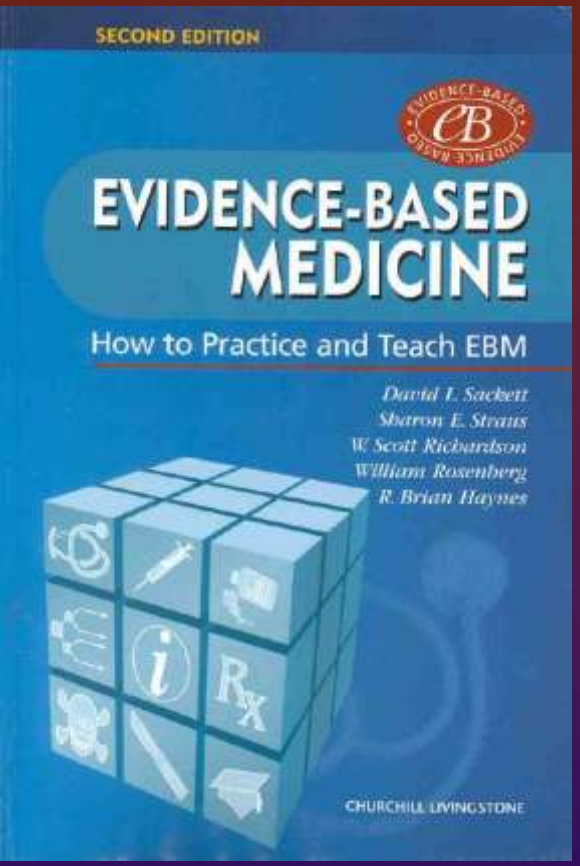


<u>artificial devices</u>
made from
<u>alloplastic materials</u>









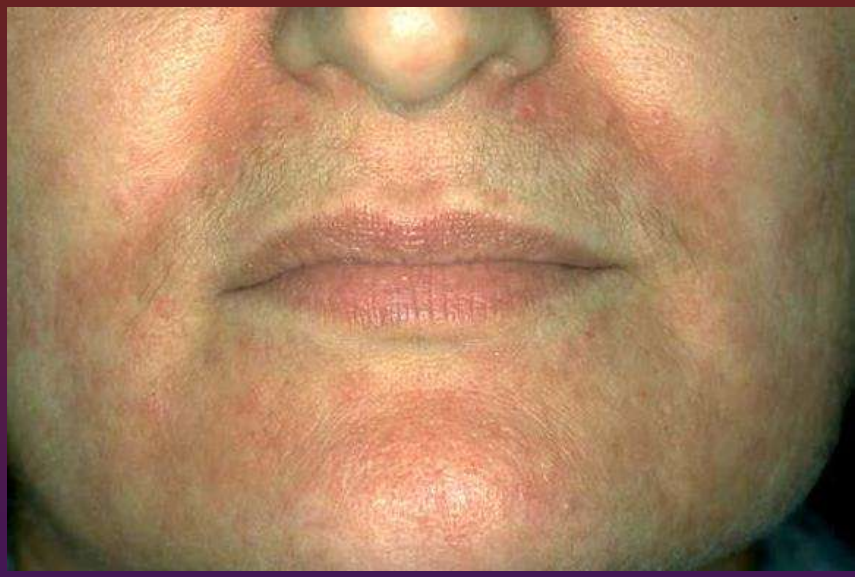
Evidence of doing more good than harm depends on adequate study design*

*Sackett DL, Strauss SE, Richardson WS, Rosenberg W, Haynes RB. Evidence-based Medicine. 2nd. edit. Churchill Livingstone, 2000.

The central tasks of clinical work

1. Clinical findings:

How to properly gather the most relevant findings from the history and physical examination, and interpret these correctly?



2. Etiology:

How to identify causes for disease (including its iatrogenic forms) ?

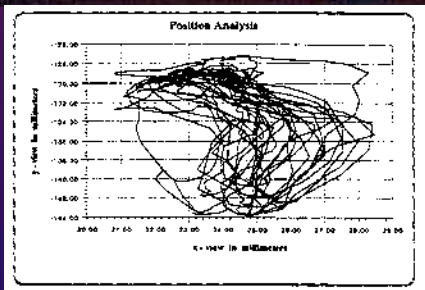
The central tasks of clinical work

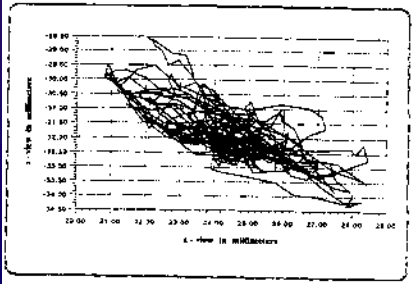
3. Differential diagnosis:

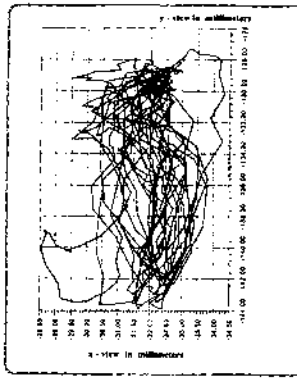
When considering the possible causes of a patient's clinical problem, how to rank them by likelihood, seriousness and treatability ?

4. Diagnostic tests

How to select and interpret diagnostic tests, in order to confirm or exclude a diagnosis, based on considering precision, acceptability,







The central tasks of clinical work

5. Prognosis:

How to estimate the patient's likely clinical course over time and anticipate likely complications?

6. Therapy:

How to select treatments to offer patients that do more good than harm and that are worth the efforts and costs of using them?

The central tasks of clinical work

7. Prevention:

How to reduce the chance of disease by identifying and modifying risk factors and how do we diagnoses disease early by screening?

8. Self-improvement:

How to keep up to date, improve our clinical skills and run a better, more efficient clinical practice?

Critical Appraisal Criteria

Exists for studies focused on:

- therapy
- diagnosis
- screening
- harm
- prognosis
- causation of disease (etiology)
- quality of care
- economic analyses
- …..

Three general questions

1. Is the study valid?
2. What are the results ?
3. Are the results relevant to my question or problem?

1. Is the Study Valid ?

- Is there a clear question?
- Is the most appropriate study design to answer the question used?
- Was the study conducted reliably?
- Can you follow what the authors did?

2. What are the results?

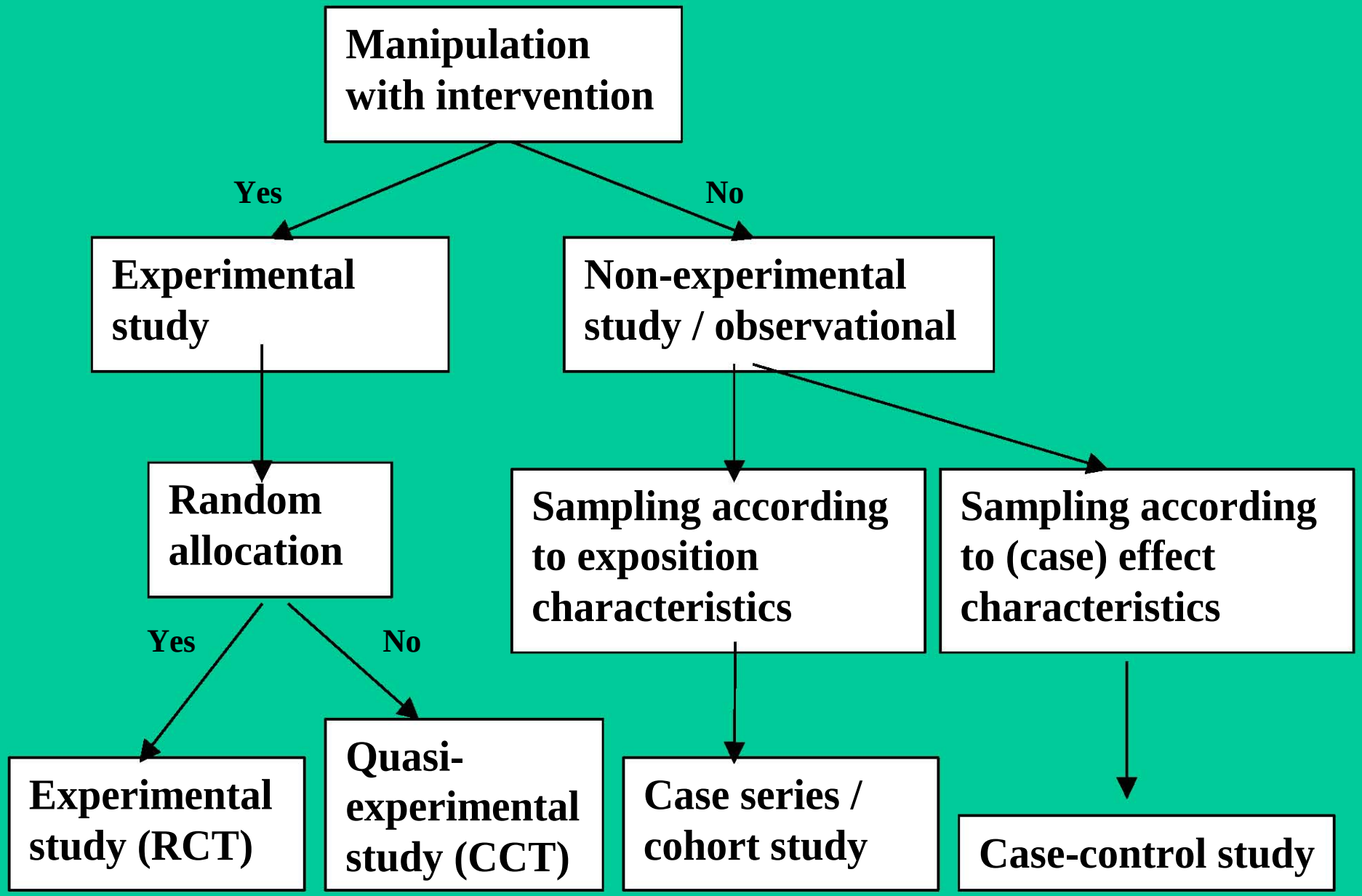
- Are the results presented in a clear and simple manner ?
- Is there a clear bottom line ?
- Are they clinically important ?

3. Are the results relevant to my question or problem ?

- Are the participants similar to my patients?
- Is it realistic for me to apply the study methodology and results to my patients?

Clinical trial terminology - tower of Bable?

analytical study
case control study (89)
case serie
case study, case report
cause-effect study
clinical trial (79)
cohort study (89)
cohort study with historical controls
controlled clinical trial (95)
cross-sectional study (89)
descriptive study
diagnostic meta-analysis
diagnostic study
double blind randomized therapeutical trial with cross-over design
ecological study
etiological study
experimental study
explorative study
feasibility study (79)
follow-up study (67)
historical cohort study
incidence study
intervention study
longitudinal study (79)
N=1 trial
non-randomized trial with contemporaneous controls
non-randomized trial with historical controls
observational study
prospective cohort study
prospective follow-up study, observational or experimental
prospective study (67)
quasi-experimental study
randomized clinical trial, RTC
randomized controlled trial, RCT (89)
retrospective cohort study
retrospective follow-up study
retrospective study (67)
surveillance study
survey, descriptive survey
therapeutic meta-analysis
trohoc study


Manipulation with intervention
Yes
No
Experimental study
Non-experimental study / observational
Random allocation
Sampling according to exposition characteristics
Sampling according to (case) effect characteristics
Yes
No
Experimental study (RCT)
Quasi-experimental study (CCT)
Case series / cohort study
Case-control study

Clinical study designs (MESH terms)

- (Case study/series)
- Case-Control Study
- Cohort Study
- Cross-Sectional Survey
- Randomised Controlled Trial (RCT)

How can the papers that have been published in refereed prosthodontic journals be characterised?

Critical appraisal of papers

- All papers published in

  International Journal of Prosthodontics **(n=826)**

  Journal of Prosthodontics **(n=305)**
- The studies categorised according to e.g. study design, description of clinical problem, prosthodontic subtopic
- Clinical studies additionally characterised by sample size and observation period
- All variables cross-tabulated for possible relationships

Study aims

I. Educational

Self improvement; teaching; skill improvement

II. Clinical problems

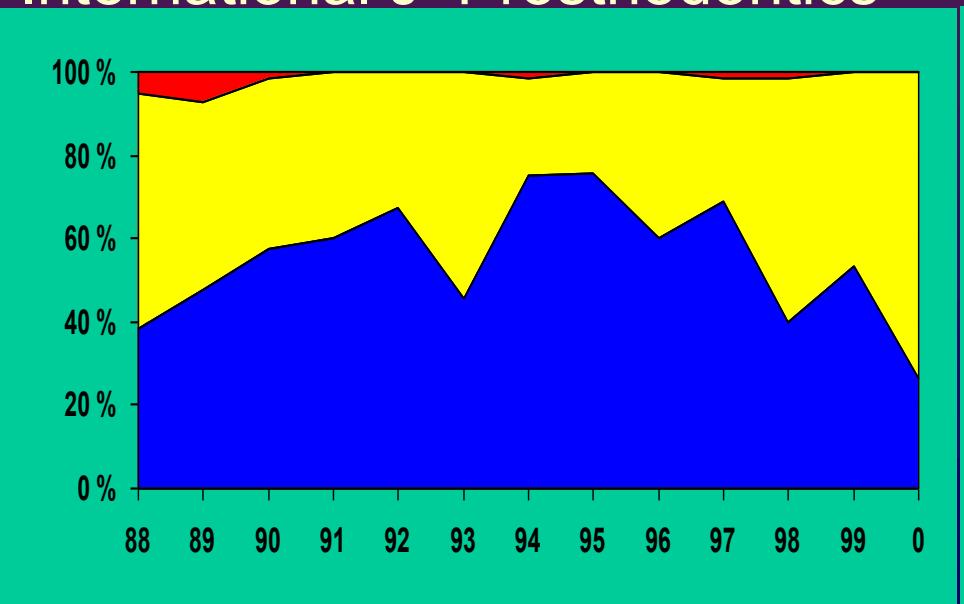
Therapy: process & outcomes; Prognosis

III. Basic sciences

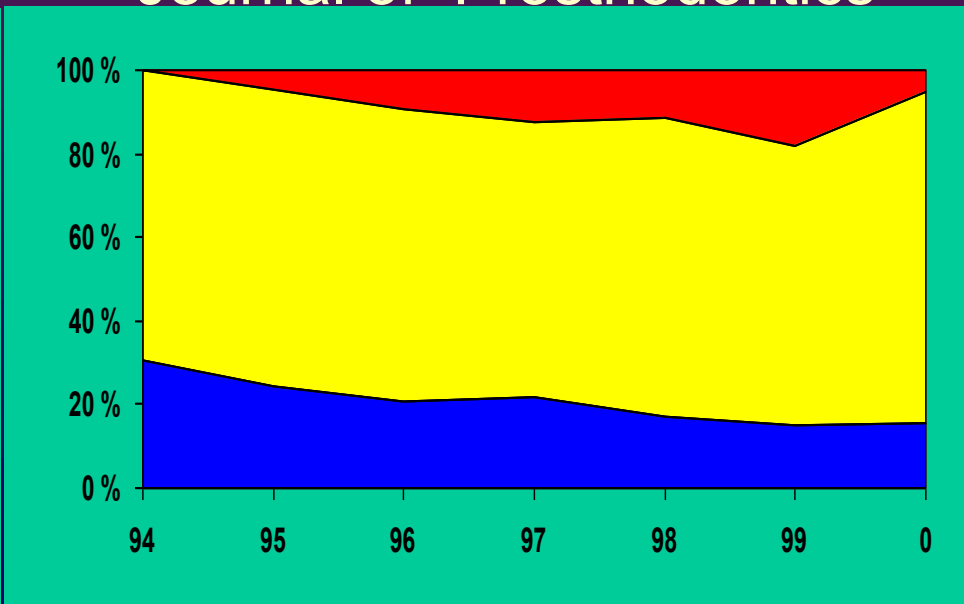
Chemistry; physics; physical-chemical properties

Biomechanics; fit accuracy; wear; stress

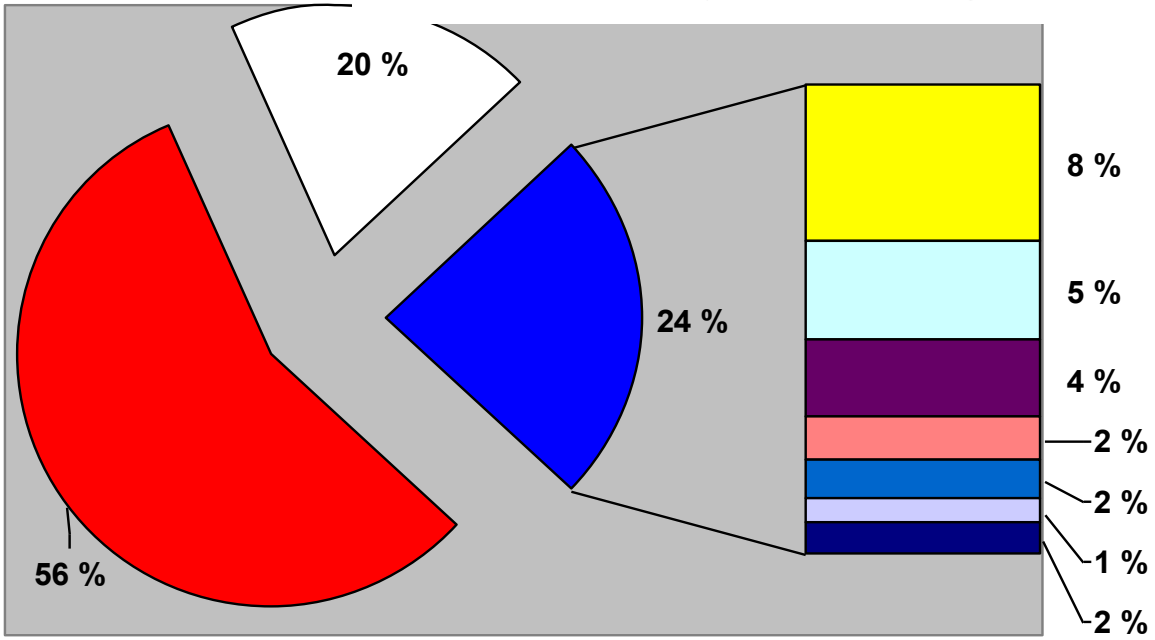
International J Prosthodontics



Journal of Prosthodontics

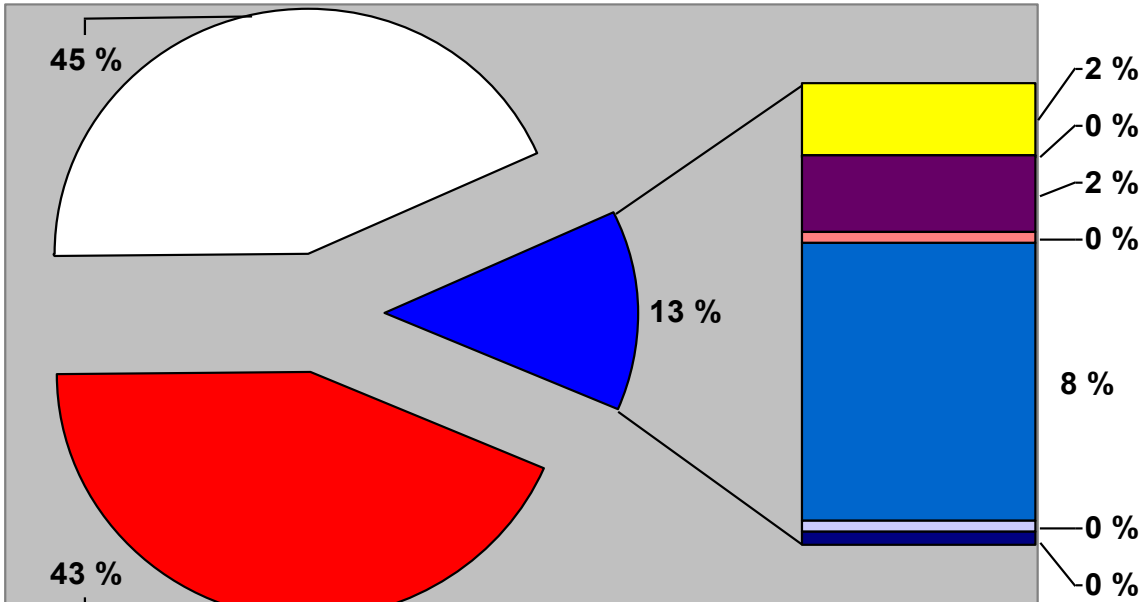


Study designs



Int J Prosthodont

- Laboratory
- Descriptive
- Cohort
- Experiment
- X-sectional
- Case-series
- Case report
- Case-control
- RCT



J Prosthodont

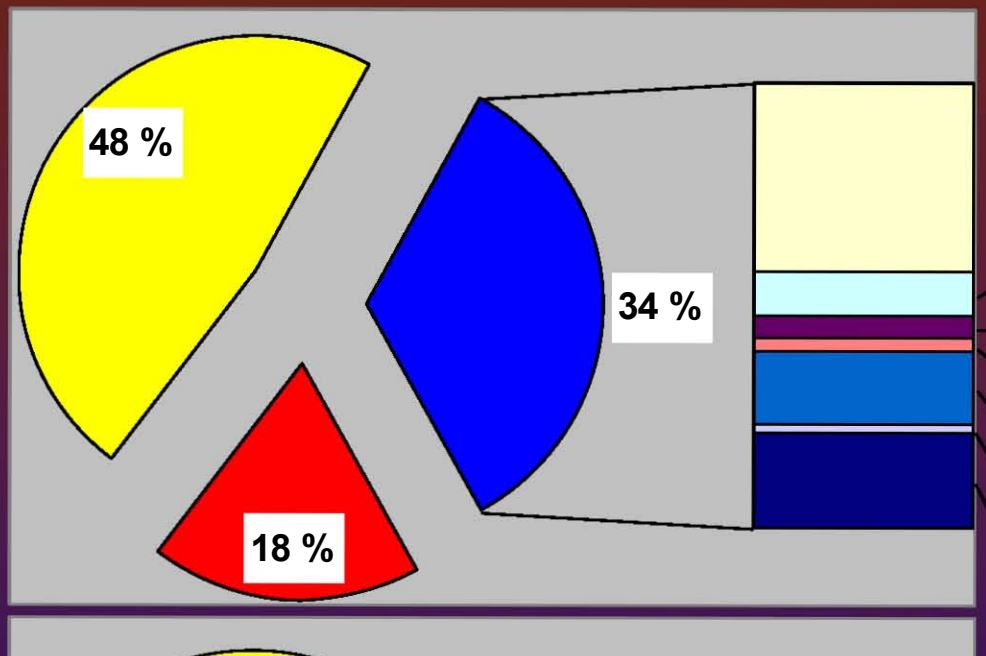
22 Case reports
6 Cohort studies
6 X-sectional studies
1 Case-control study
1 RCT

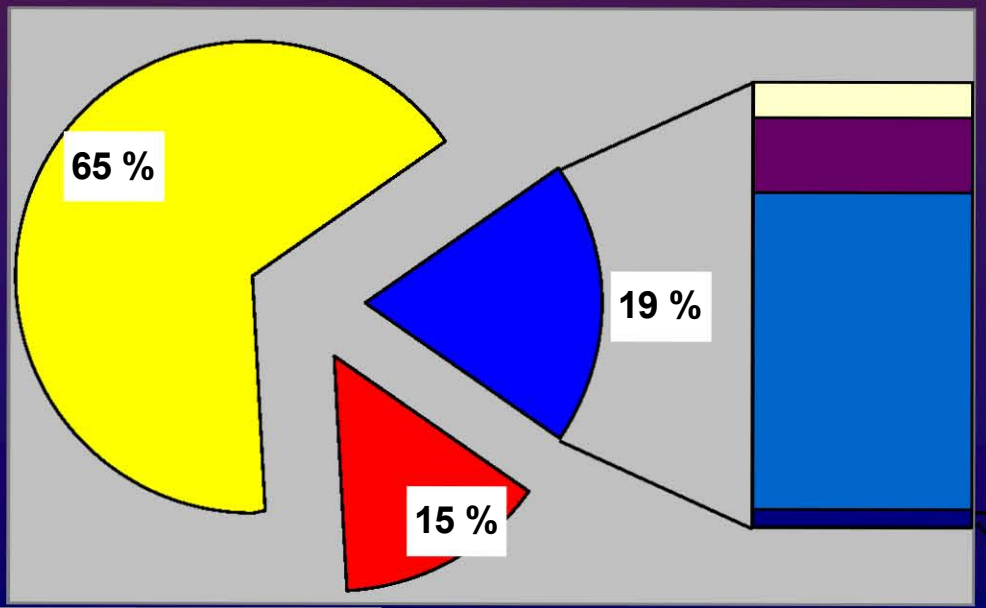
Oxford Centre for Evidence-based Medicine Levels of Evidence (May 2001)

Level	Therapy/Prevention, Aetiology/Harm	Prognosis	Diagnosis	Differential diagnosis/symptom prevalence study	Economic and decision analyses
1a	SR (with homogeneity*) of RCTs	SR (with homogeneity*) of inception cohort studies; CDR† validated in different populations	SR (with homogeneity*) of Level 1 diagnostic studies; CDR† with 1b studies from different clinical centres	SR (with homogeneity*) of prospective cohort studies	SR (with homogeneity*) of Level 1 economic studies
1b	Individual RCT (with narrow Confidence Interval‡)	Individual inception cohort study with ≥ 80% follow-up; CDR† validated in a single population	Validating** cohort study with good††† reference standards; or CDR† tested within one clinical centre	Prospective cohort study with good follow-up****	Analysis based on clinically sensible costs or alternatives; systematic review(s) of the evidence; and including multi-way sensitivity analyses
1c	All or none§	All or none case-series	Absolute SpPins and SnNouts††	All or none case-series	Absolute better-value or worse-value analyses ††††
2a	SR (with homogeneity*) of cohort studies	SR (with homogeneity*) of either retrospective cohort studies or untreated control groups in RCTs	SR (with homogeneity*) of Level >2 diagnostic studies	SR (with homogeneity*) of 2b and better studies	SR (with homogeneity*) of Level >2 economic studies
2b	Individual cohort study (including low quality RCT; e.g., <80% follow-up)	Retrospective cohort study or follow-up of untreated control patients in an RCT; Derivation of CDR† or validated on split-sample§§§ only	Exploratory** cohort study with good†††reference standards; CDR† after derivation, or validated only on split-sample§§§ or databases	Retrospective cohort study, or poor follow-up	Analysis based on clinically sensible costs or alternatives; limited review(s) of the evidence, or single studies; and including multi-way sensitivity analyses
2c	"Outcomes" Research; Ecological studies	"Outcomes" Research		Ecological studies	Audit or outcomes research
3a	SR (with homogeneity*) of case-control studies		SR (with homogeneity*) of 3b and better studies	SR (with homogeneity*) of 3b and better studies	SR (with homogeneity*) of 3b and better studies
3b	Individual Case-Control Study		Non-consecutive study; or without consistently applied reference standards	Non-consecutive cohort study, or very limited population	Analysis based on limited alternatives or costs, poor quality estimates of data, but including sensitivity analyses incorporating clinically sensible variations.
4	Case-series (and poor quality cohort and case-control studies§§)	Case-series (and poor quality prognostic cohort studies***)	Case-control study, poor or non-independent reference standard	Case-series or superseded reference standards	Analysis with no sensitivity analysis
5	Expert opinion without explicit critical appraisal, or based on physiology, bench research or "first principles"	Expert opinion without explicit critical appraisal, or based on physiology, bench research or "first principles"	Expert opinion without explicit critical appraisal, or based on physiology, bench research or "first principles"	Expert opinion without explicit critical appraisal, or based on physiology, bench research or "first principles"	Expert opinion without explicit critical appraisal, or based on economic theory or "first principles"

Clinical problem vs. study design - therapy

International Journal Prosthodontics (n=180)





- In vitro
- Descriptive
- Cohort
- Experiment
- X-sectional
- Case-series
- Case report
- Case-control
- RCT

Journal of Prosthodontics (n=124)

Oxford Centre for Evidence-based Medicine Levels of Evidence (May 2001)

Level	Therapy/Prevention Aetiology/Harm	Prognosis	Diagnosis	Differential diagnosis/symptom prevalence study	Economic and decision analyses
1a	SR (with homogeneity*) of RCTs	SR (with homogeneity*) of inception cohort studies; CDR† validated in different populations	SR (with homogeneity*) of Level 1 diagnostic studies; CDR† with 1b studies from different clinical centres	SR (with homogeneity*) of prospective cohort studies	SR (with homogeneity*) of Level 1 economic studies
1b	Individual RCT (with narrow Confidence Interval‡)	Individual inception cohort study with ≥ 80% follow-up; CDR† validated in a single population	Validating** cohort study with good††† reference standards; or CDR† tested within one clinical centre	Prospective cohort study with good follow-up****	Analysis based on clinically sensible costs or alternatives; systematic review(s) of the evidence; and including multi-way sensitivity analyses
1c	All or none§	All or none case-series	Absolute SpPins and SnNouts††	All or none case-series	Absolute better-value or worse-value analyses ††††
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2c	"Outcomes" Research; Ecological studies	"Outcomes" Research		Ecological studies	Audit or outcomes research
3a	SR (with homogeneity*) of case-control studies		SR (with homogeneity*) of 3b and better studies	SR (with homogeneity*) of 3b and better studies	SR (with homogeneity*) of 3b and better studies
3b	Individual Case-Control Study		Non-consecutive study; or without consistently applied reference standards	Non-consecutive cohort study, or very limited population	Analysis based on limited alternatives or costs, poor quality estimates of data, but including sensitivity analyses incorporating clinically sensible variations.
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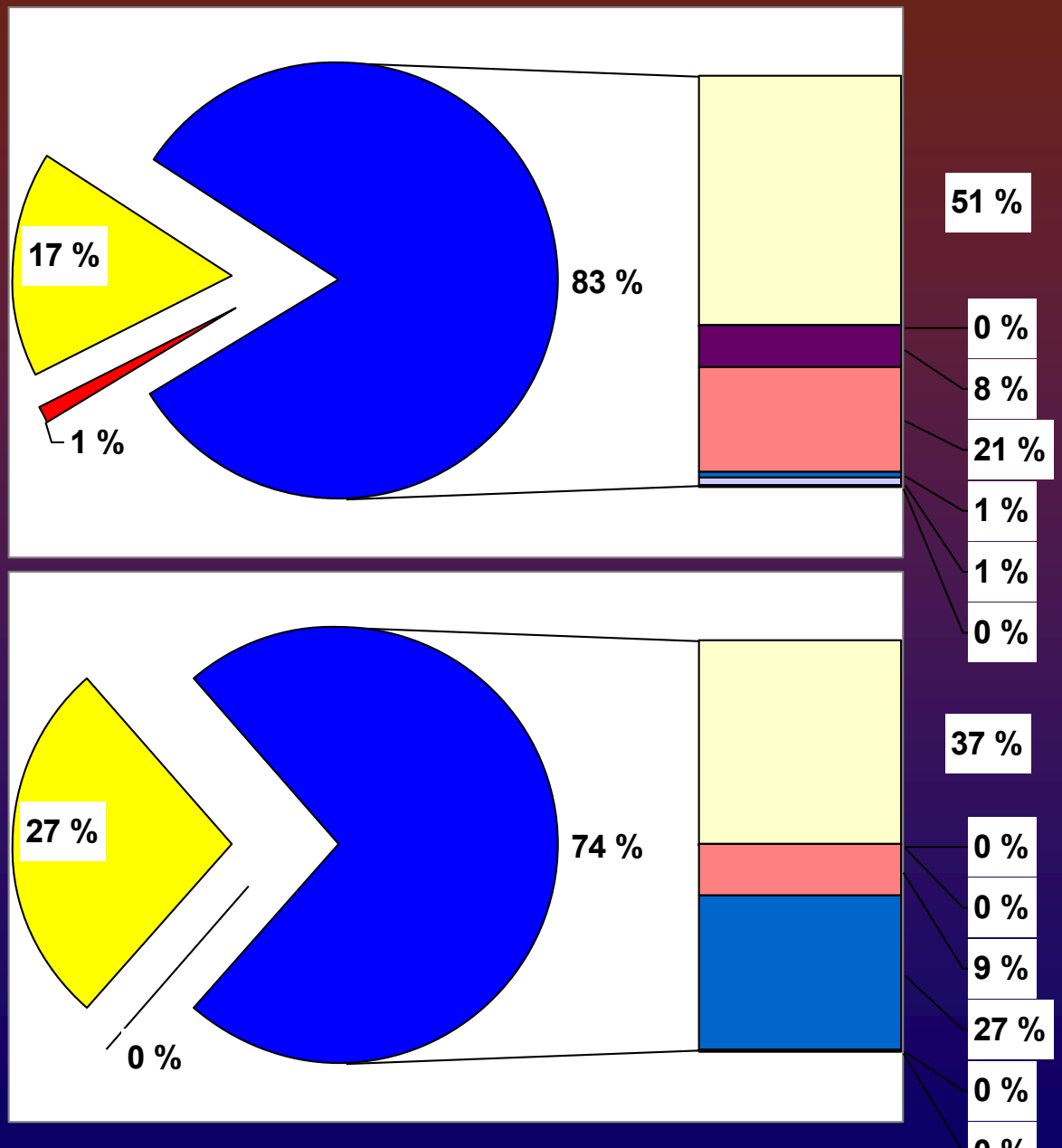
Clinical problem vs. study design - Prognosis



International Journal Prosthodontics (n=72)

- In vitro
- Descriptive
- Cohort
- Experiment
- X-sectional
- Case-series
- Case report
- Case-control
- RCT

Journal of Prosthodontics (n=11)

Clinical studies - design characteristics

	Number of cohorts			Observation period		Size	
	1	2	>2	span	average	span	average
Prospective (n=52) (n=4)	39 3	2	3 1	48 days - 25 years	4.7 years	4 -300	56
Retrospective (n=23) (n=2)	13 1	1	3 1	2 - 25 years	7.2 years	24 - 524	120
Case series (n=15) (n=1)	15	-	-	3 mths - 13 years	4.4 years	8- 344	88
RCT (n=10) (n=1)	-	7	3	14 days - 4 years	< 1 year	14-85	43

	Size	
	span	average
Cross-sectional (n=32)(n=6)	13- 1608 24-1286	202 612
Experimental (n=41)(n=0)	1 -79	22
Case-control (n=10)(n=1)	8- 250	95

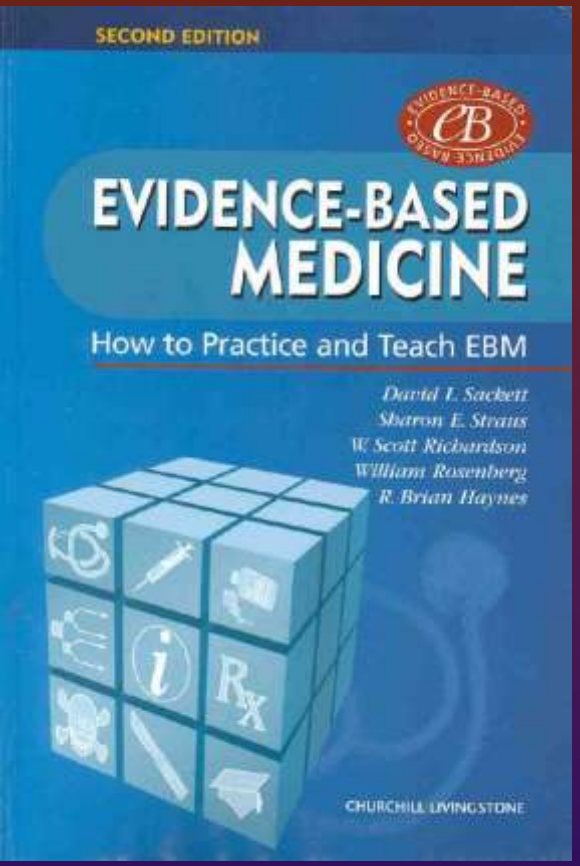
Conclusions

Many papers focus on:

- **basic research problems with little direct clinical relevance**
- **clinical studies with poor evidence of therapeutic benefits of prosthodontic treatment**

Few papers focus on:

- **comparative clinical studies**
- **longitudinal clinical studies that validate treatment outcomes**



Evidence of doing more good than harm depends on adequate study design*.

Therapy

*Sackett DL, Strauss SE, Richardson WS, Rosenberg W, Haynes RB. Evidence-based Medicine. 2nd. edit. Churchill Livingstone, 2000.

Strength of evidence of treatment effects

CEBM, 2001. (http://cebm.jr2.ox.ac.uk/docs/levels.html)

1a. Systematic review of RCTs (with homogeneity of RCTs)

1b. Individual RCT (with narrow confidence interval)

2a. Systematic review (with homogeneity) of cohort studies

2b. Individual cohort study (and low quality RCT; e.g.,<80% follow-up)

3a. Systematic review (with homogeneity) of case-control studies

3b. Individual case-control study

4. Case-series (and poor quality cohort and case-control studies)

5. Expert opinion without explicit critical appraisal, or based on physiology, bench research or “first principles”

Differences in outcomes-single tooth loss?

1) Conventional fixed partial dentures versus etch-bridges?
2) Conventional fixed partial dentures versus crown supported by a single root formed implant?
3) Etch-bridge versus crown supported by a single root formed implant?
4) Identical crowns supported by root formed implants with different composition and/or surface design?

Differences in outcomes-multiple tooth loss?

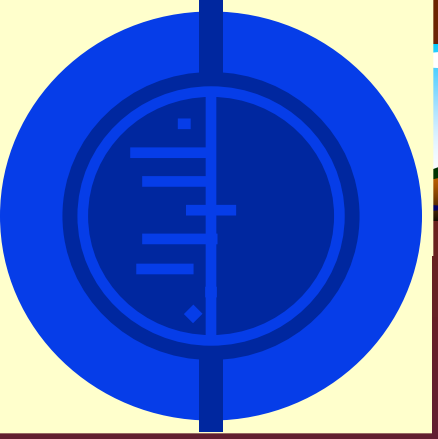
1) Fixed partial dentures versus removable dentures?
2) Conventional fixed partial dentures versus etch-bridges?
3) Fixed partial dentures versus fixed partial dentures supported by implants?
4) Fixed partial dentures supported by implants and teeth and fixed partial dentures supported only by implants?
5) Identical prostheses supported by implants with different composition and/or surface design?

Differences in outcomes-edentulousness?

1) Identical prostheses supported by soft tissue versus soft tissue and remaining roots.
2) Identical prostheses supported by soft tissue versus implants.
3) Identical prostheses supported by two versus more than two implants.
4) Identical prostheses supported by soft tissue versus implants with non-root forms.
5) Identical prostheses supported by implants with different composition and/or surface design.
6) Removable versus fixed prostheses supported by implants.
7) Removable prostheses connected with implants using different prosthesis/internal fixation devices.
8) Fixed prostheses supported by implants depending on the number of root formed implants

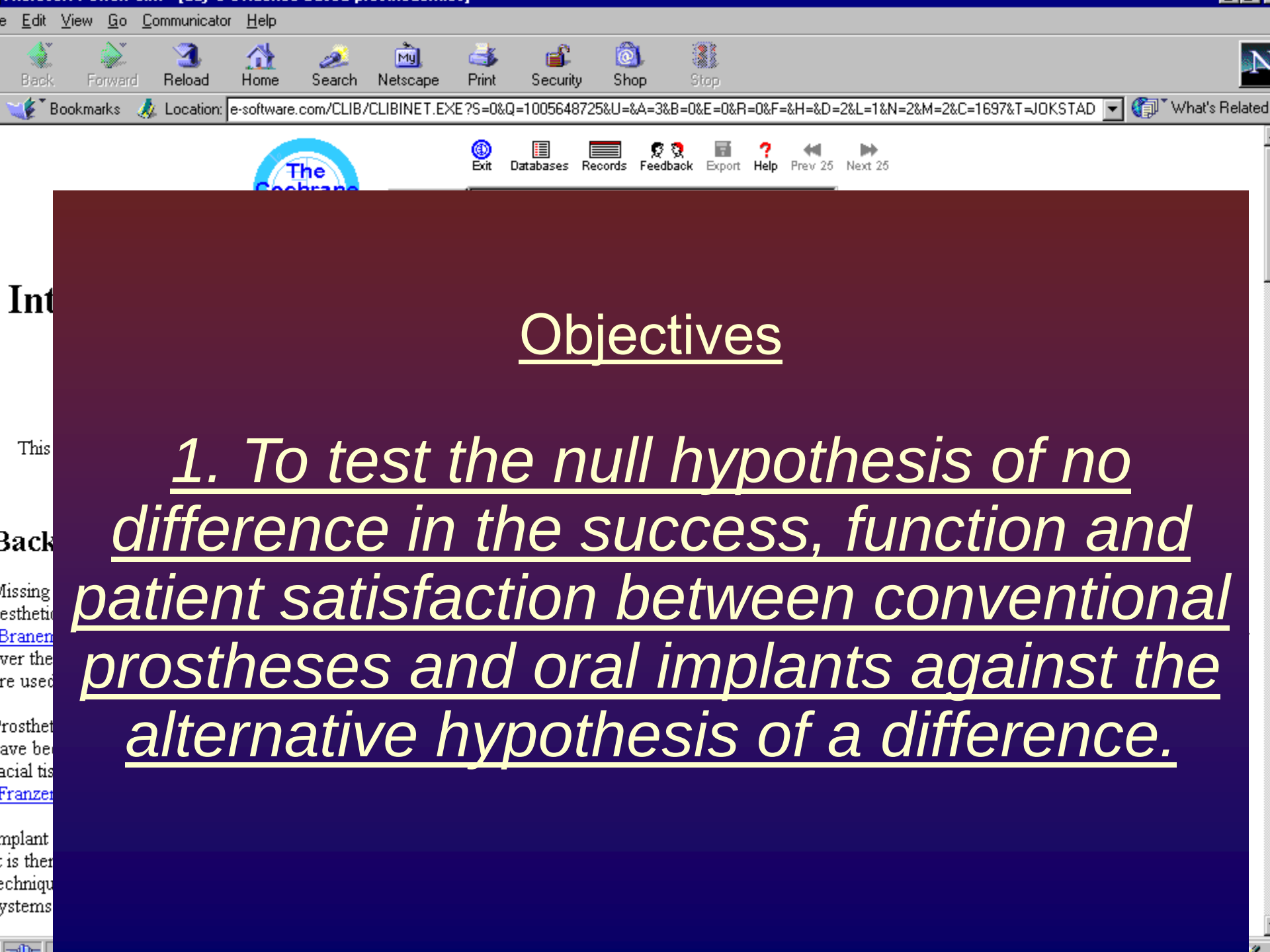
Safety and effectiveness - implant prosthetics?

- Implant surface
  - Self-tapping vs standard
  - Rough vs smooth surface
  - Titanium vs Hydroxyapatite
- Implant surgery techniques
- Guided bone regeneration
- Maintenance regimes
- Prosthesis type
  - Stress-breaker vs non-stress breaker
  - Splinted vs unsplinted connection
- Implant-prosthesis connection
  - Fixed vs overdentures
  - Hybrid versus ball-attachment
  - Different overdenture attachments
  - Laser-welded vs cast Ti-framework



Cochrane Collaboration

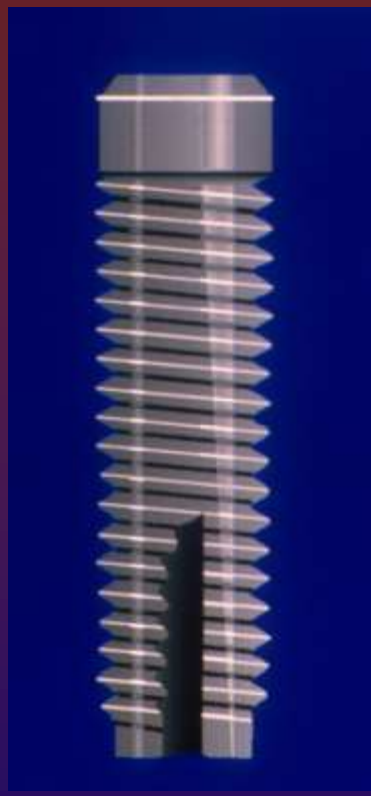
International organisation that aims to help people make well-informed decisions about healthcare by preparing, maintaining and promoting the accessibility of systematic reviews of the effects of health care interventions.


Edit View Go Communicator Help
Back Forward Reload Home Search Netscape Print Security Shop Stop
Bookmarks Location: e-software.com/CLIB/CLIBINET.EXE?S=0&Q=1005648725&U=&A=3&B=0&E=0&R=0&F=&H=&D=2&L=1&N=2&M=2&C=1697&T=JOKSTAD What's Related
Exit Databases Records Feedback Export Help Prev 25 Next 25
Objectives
1. To test the null hypothesis of no difference in the success, function and patient satisfaction between conventional prostheses and oral implants against the alternative hypothesis of a difference.

Endosseous Implants

Dentists have to choose from more than 1,300 implants*.

These vary in form, material, dimension, surface properties and interface geometry.



*Binon PP. Implants and components: entering the new millennium. Int J Oral Maxillofac Implants 2000;15:76-94

Objectives

1. To test the null hypothesis of no difference in the success, function and patient satisfaction between conventional prostheses and oral implants against the alternative hypothesis of a difference.

2. To test the null hypothesis of no difference in the long term success, morbidity, function and patient satisfaction between different oral implant characteristics and techniques against the alternative hypothesis of a difference.

Method of a Cochrane review - 1. Search for papers

1. Search of the Cochrane Oral Health Group specialist register (n > 12.000 papers) , using key words (e.g. prosthesis, bridge, implant*). Additional handsearch of journals
2. Search for RCT trials in Medline
3. Search of the bibliographies of identified RCTs, reviews and personal references
4. Letters to first named authors of identified RCTs for further information about trials and attempts to identify unpublished studies

Method of a Cochrane review - 2. Initial data synthesis

1. Two reviewers work independently, and in duplicate.
2. The relevance of each potentially interesting article is appraised in a non-blinded fashion with regard to the types of intervention.
3. Recordings of article ownership, affiliation, year of publication and journal.
4. Identification of funding source (commercial, independent or unclear) clinical setting (university, non-university, unclear) study design (parallel, split-mouth or cross-over) and sample size.

Method of a Cochrane review - 3 Quality assessment

5. Quality assessment of RCTs trials with sample sizes:
   - ≥ 10 for parallel trials
   - ≥ 5 for split-mouth and cross-over studies

A sensitivity analysis conducted if appropriate.

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Bookmarks Location: http://www.consort-statement.org/statement.html

CONSORT STATEMENT

strength in science, sound ethics

Improving the Quality of Reporting of Randomized Controlled Trials

Colin Begg, PhD; Mildred Cho, PhD; Susan Eastwood, ELS(D); Richard Horton, MB; David Moher, MSc; Ingram Olkin, PhD; Roy Pitkin, MD; Drummond Rennie, MD; Kenneth F. Schulz, PhD; David Simel, MD; Donna F. Stroup, PhD

TRANSLATIONS AND PDF FORMATS

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- The Statement Checklist (8 K)
- The Statement Flowchart (6 K)
- The Statement Comments Section(10 K)
- The Statement References List (14 K)

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Foreign Language Translations of CONSORT:

- FRENCH
- GERMAN
- SPANISH
- JAPANESE (This site requires a browser configured for Japanese text)
- For hard copy versions of the CONSORT Statement in Dutch please contact us.

INTRODUCTION

Document: Done

Method of a review- 3.Quality assessment

A) A sample size calculation undertaken?

B) Adequate randomization and allocation concealment method?

C) Inclusion/exclusion criteria clearly defined?

D) Reasons for withdrawal specified by study group?

E) Control and treatment groups comparable at entry for important prognostic factors?

F) Any attempt at blinding (e.g. independent assessor)?

G) Appropriate statistical analysis?

Quality Assessment of Randomized Controlled Trials of Oral Implants

Maroo Esposito, DDS, PhD/Paul Coulthard, BDS, MFGDP, MDS, FDSRCS, PhD/
Helen V. Worthington, BSc, MSC, PhD, FIS/Asbjørn Jokstad, DDS, PhD

The aim of this study was to assess the quality of randomized controlled trials (RCTs) concerned with the effectiveness of oral implants and to create a trial register. A multi-layered search strategy was used to identify all RCTs published to the end of 1999 in any language. The Cochrane Oral Health Group specialist register, PubMed and personal libraries were searched. Seventy-four RCTs were identified. Forty-tre articles, not presenting the same patient material, were independently assessed by 3 researchers using a specifically designed form. A statistician assessed all trials for appropriateness of statistics. The quality of each study was assessed on 7 items including 3 key domains. Randomization and concealment allocation procedures were not described in 30 articles (70%). Reasons for withdrawals were not given in 10 (23%) reports. No attempt of blinding was reported in 31 studies (72%). The quality of RCTs of oral implants is poor and needs to be improved. INT J ORAL MAXILLOFAC IMPLANTS 2001;16:)

Key words: *dental implants, randomized controlled trial, registries, research design, review literature*

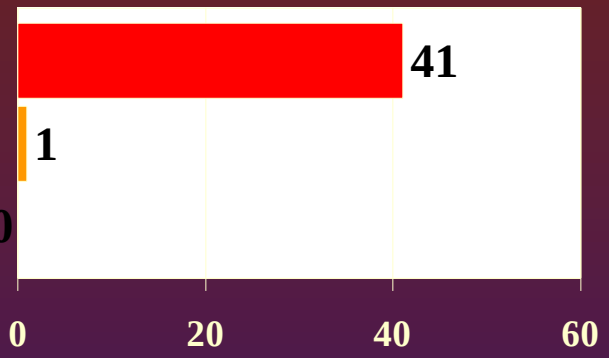
Method of a review- 3.Quality assessment

A) Was a sample size calculation undertaken?

0 No/not mentioned

1 Yes, but not confirmed by calculation

2 Yes, confirmed



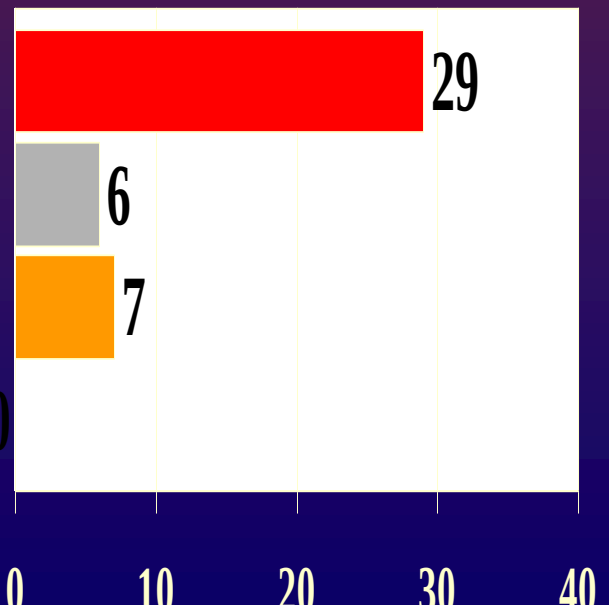
B) Randomization and allocation concealment method

0 Not described

1 Clearly inadequate - transparent before assignment

2 Possibly adequate-sealed envelopes

3 Clearly adequate- centralized randomization and third party contact for group code

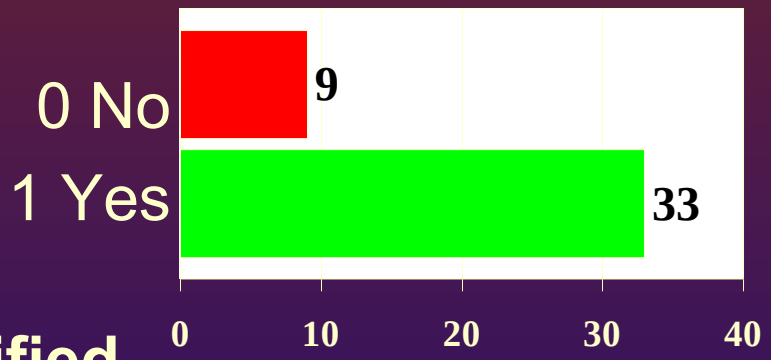


Method of a review- 3.Quality assessment

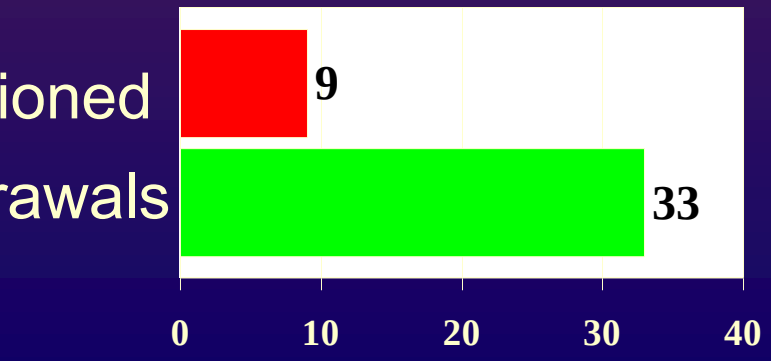
A) Was a sample size calculation undertaken?

B) Randomization and allocation concealment method

C) Were inclusion/exclusion criteria clearly defined?



D) Was reason for withdrawal specified by study group?



Method of a review- 3.Quality assessment

A) Was a sample size calculation undertaken?
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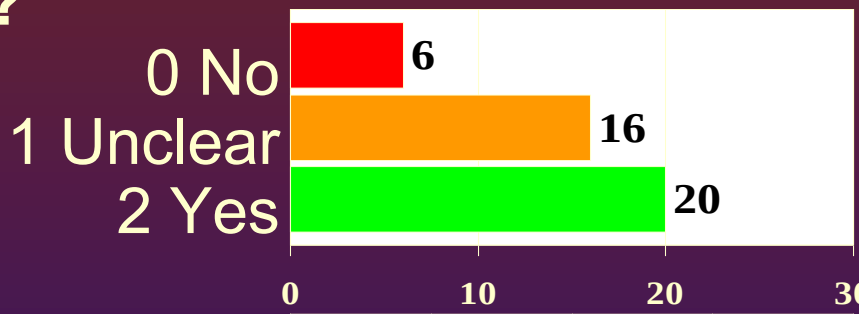
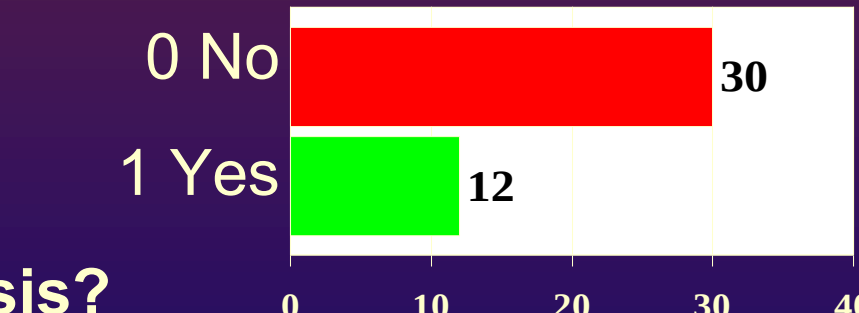
C) Were inclusion/exclusion criteria clearly defined?
D) Was reason for withdrawal specified by study group?

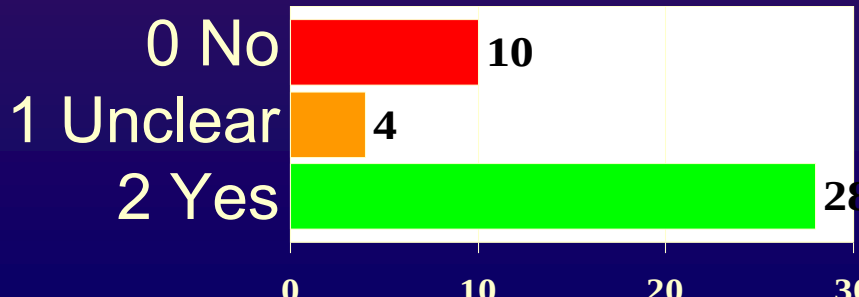
E) Comparable study groups at entry for important prognostic factors?



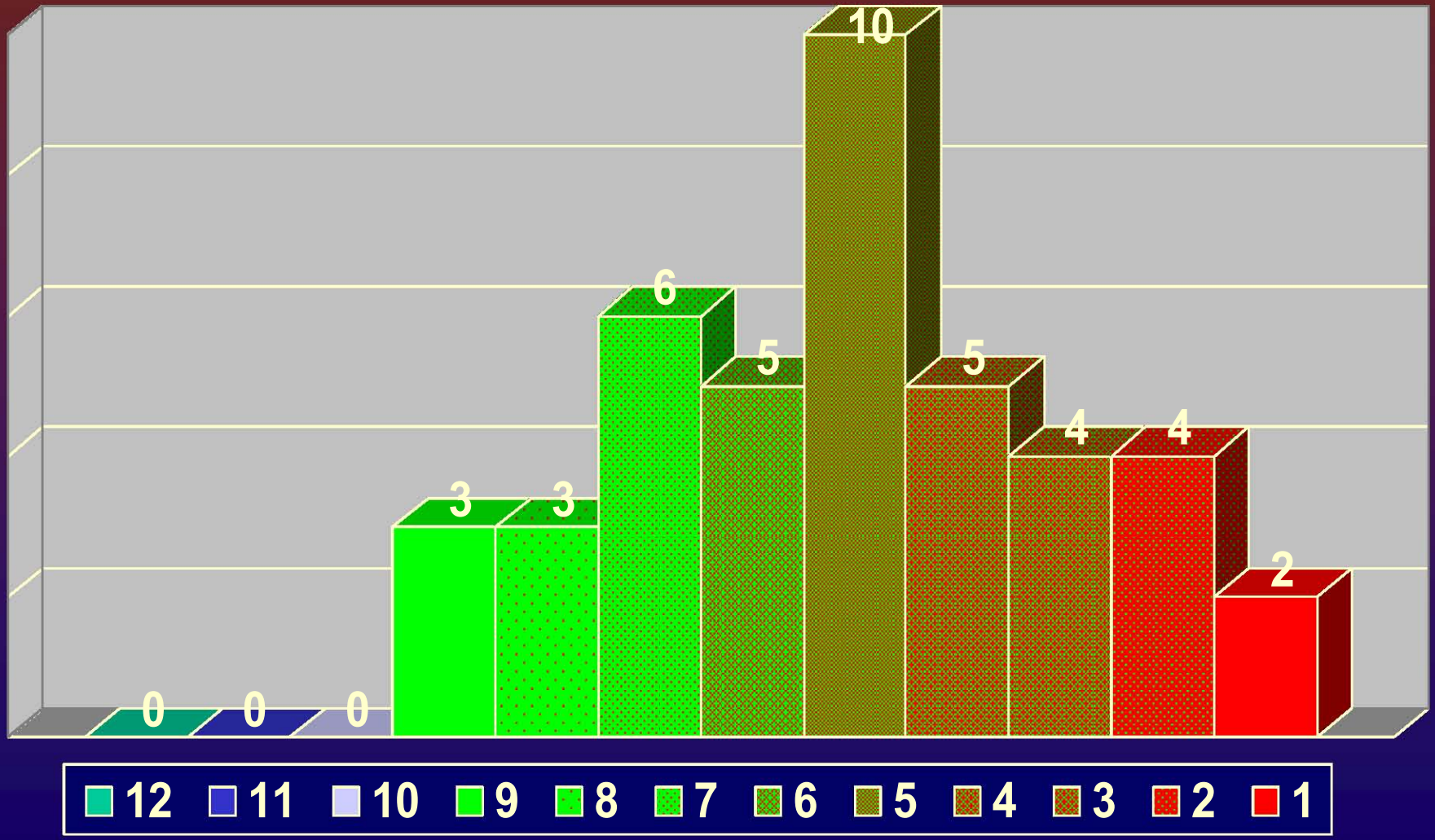
F) Any attempt at blinding



G) Appropriate statistical analysis?



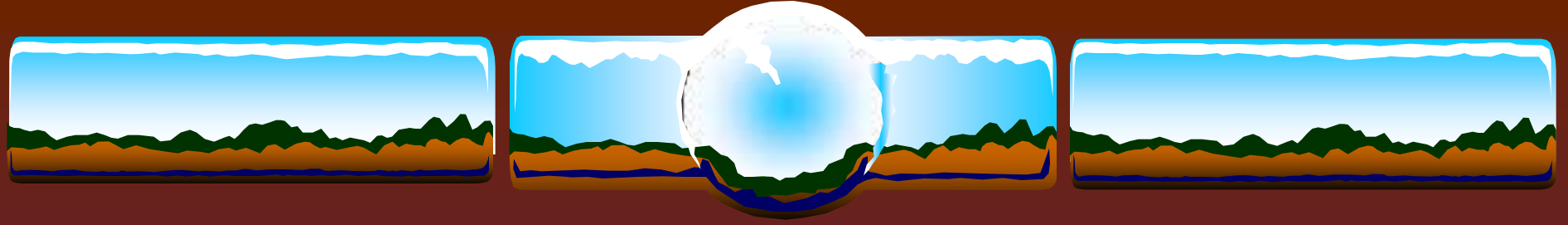
Methodologic scoring of RCTs (n=42)



Method of a review- 4. Data synthesis

1. Two reviewers work independently, and in duplicate.
2. Appraise:

- patient age
- withdrawals by group
- reasons for withdrawals
- primary outcomes for all time points mentioned in the study report.



Primary outcomes: Patient or Dentist centered criteria ?

Which outcome criteria?

1) Implant mobility and implant removal of stable implants dictated by progressive marginal bone loss
2) Implant fracture and other mechanical complications that do not allow the use of the implants
3) Radiographic marginal bone level changes on standardised intra-oral radiographs

Which outcome criteria?

- Plaque
- Marginal bleeding
- Probing pocket depth
- Probing “attachment” level
- Radiographic marginal bone level changes on standardised intra-oral radiographs

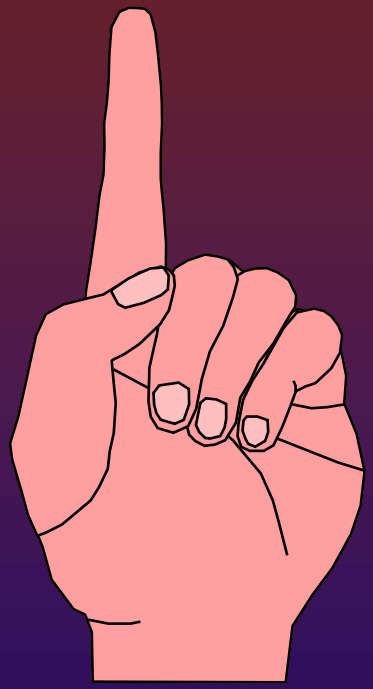
Measures relative to treatment outcomes

Perceived/self reported:

- Adaptation to prosthesis (satisfaction)
- Appearance
- Function (chewing, speech)
- Dietary significance (intake, selection)
- Health
- Quality of life (psyche, wellbeing, self esteem)
- Social activity

Observed:

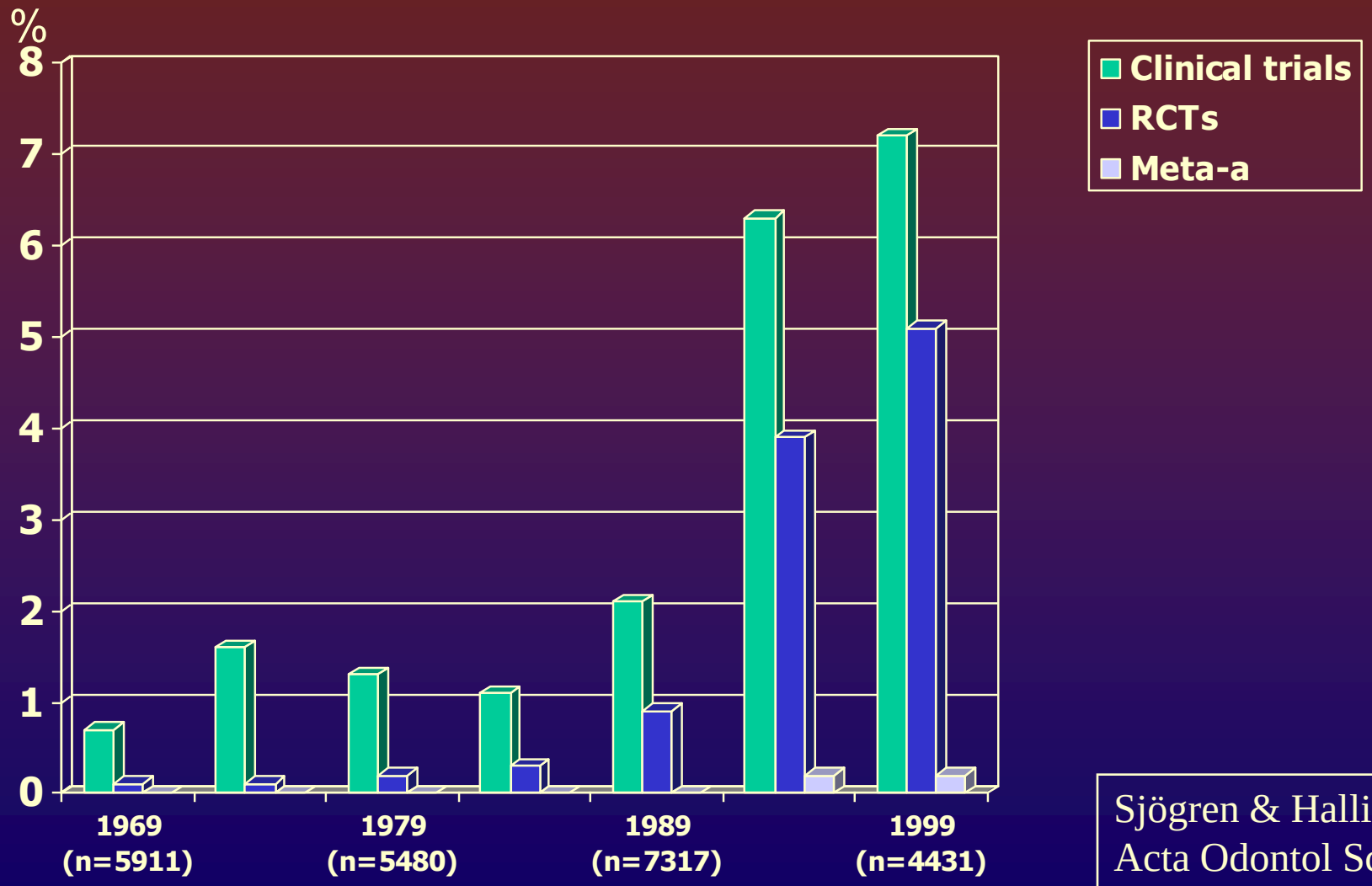
- Appearance
- Function (bite force, tracking)
- Diet survey
- Health indices *
- HRQL indices*
- Social activity



Most publications in the dental literature are not RCTs

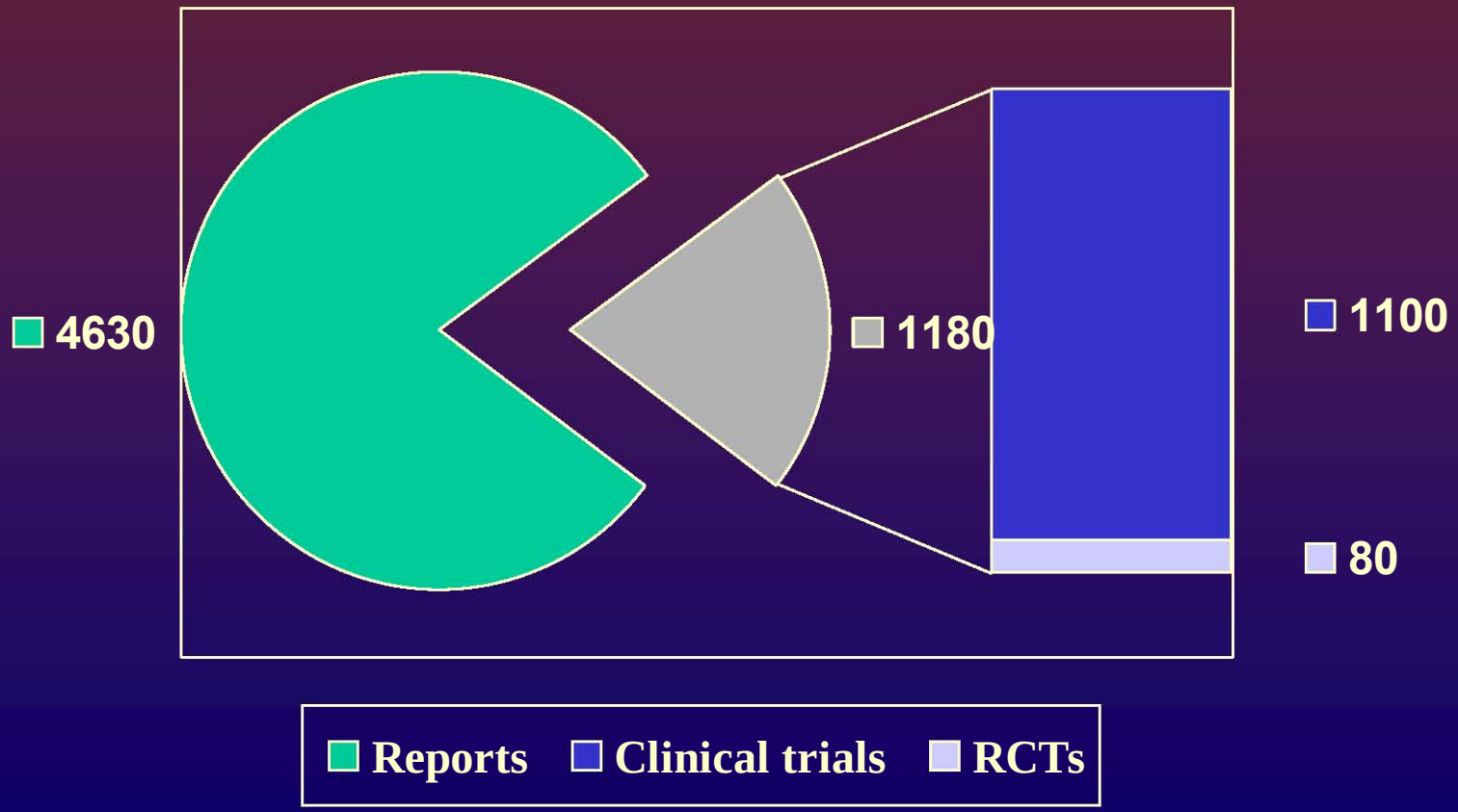
Dental Research-Medline 1969-1999

In 1999: 7% clinical research, 5% RCT

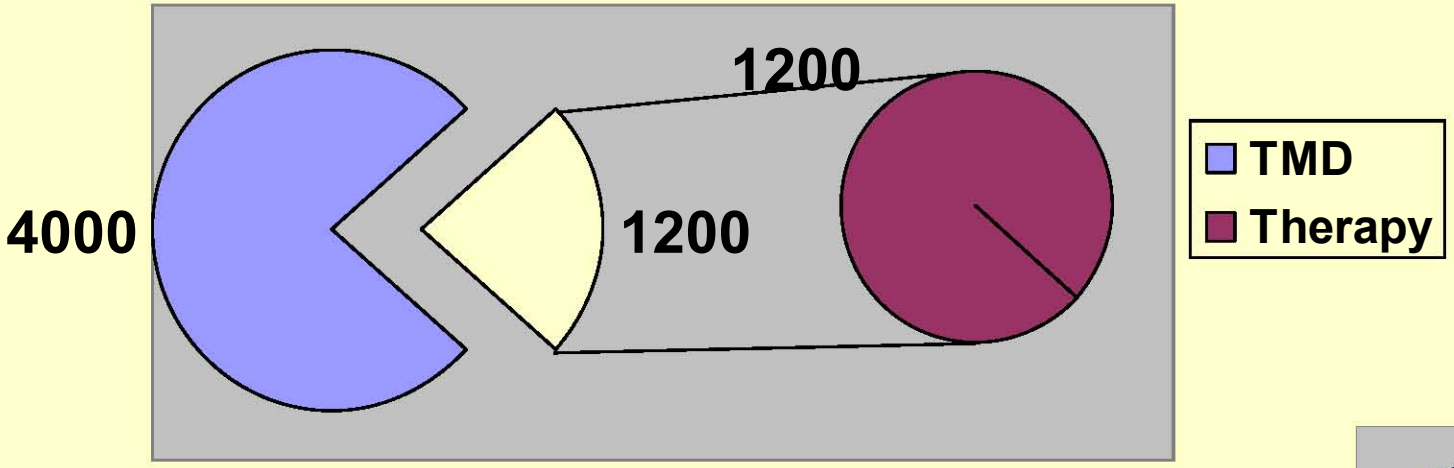


Sjögren & Halling, Acta Odontol Scand 2000

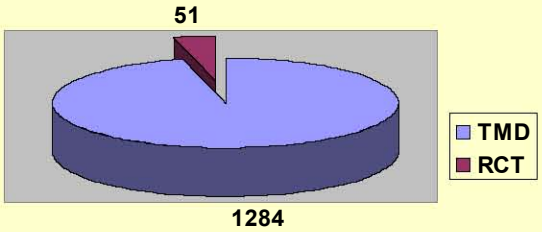
Randomised Controlled Trials in Oral Implant research

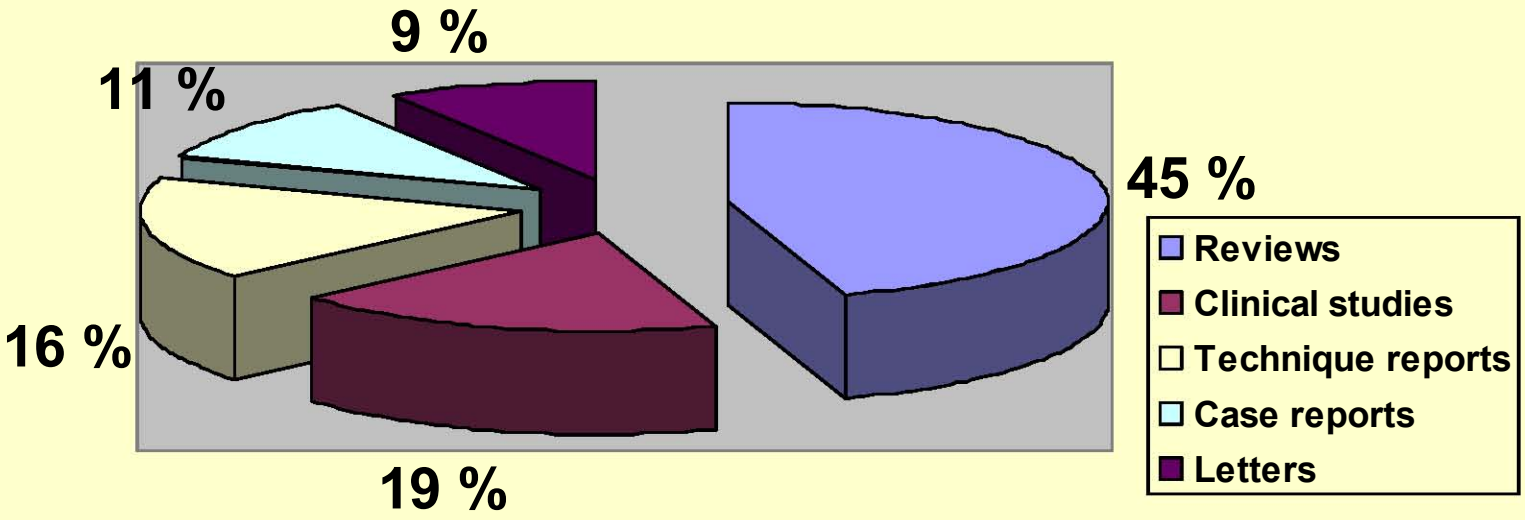


TMD studies 1980-92

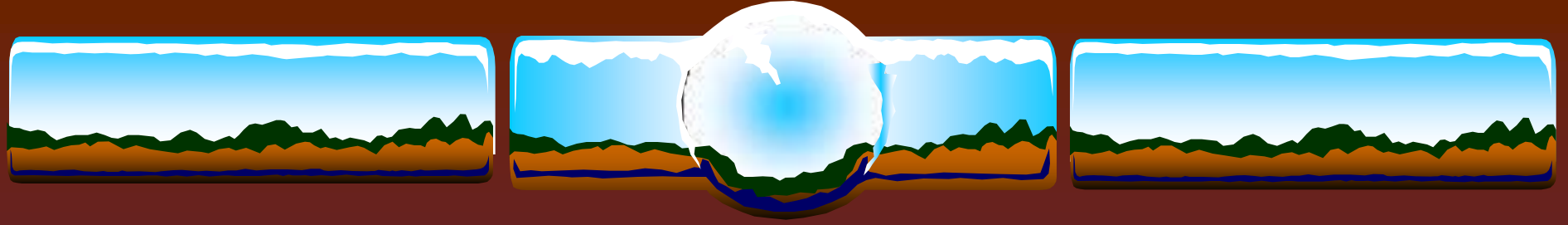


RCT studies



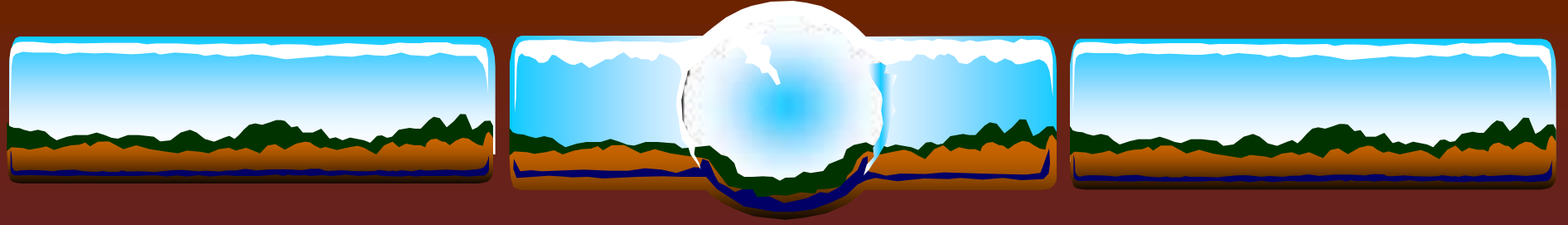


Antzcak-Bouckoms, 1995



Why so few Randomised Controlled Trials in Prosthetic Dentistry ?

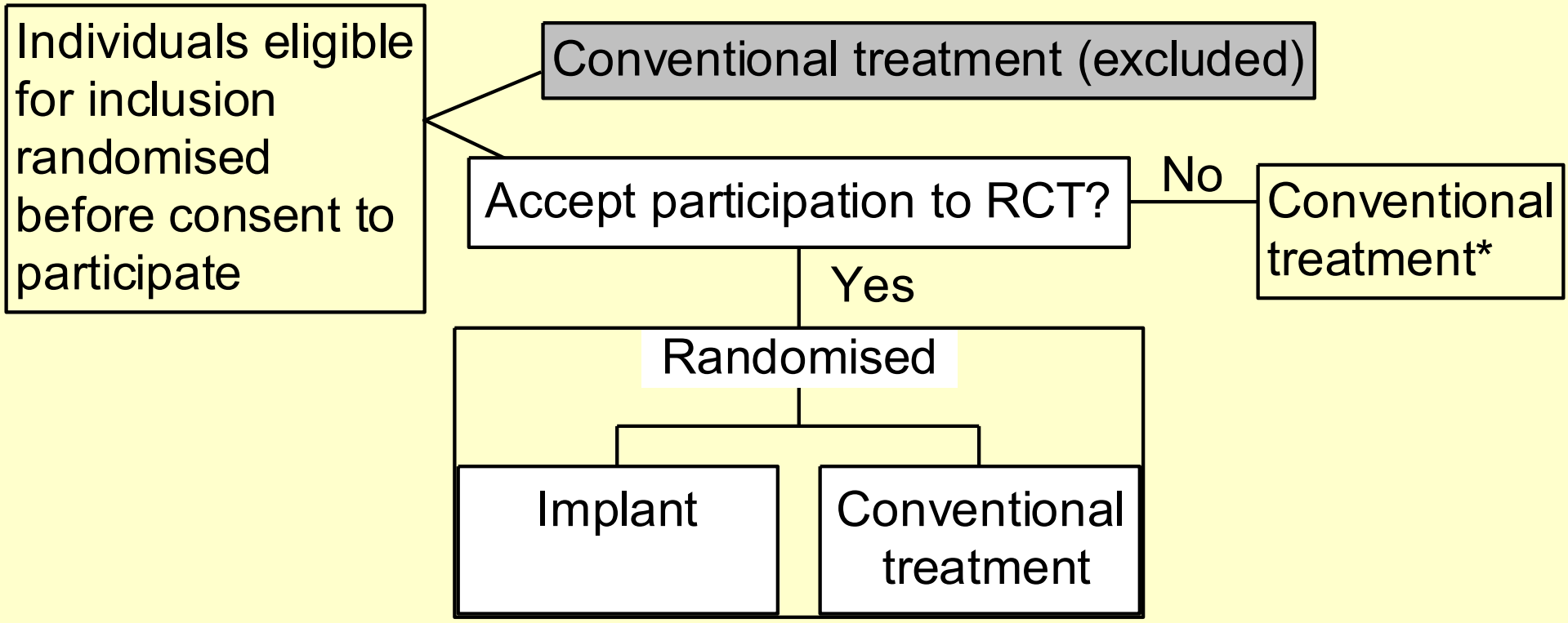
1. Ethical issues - RCT vs uncertainty
   - Dentist preference
   - Patient preference
   - Similar arms in RCT studies?
     - patient satisfaction
2. Complex - and never identical - treatment considerations



1. Randomised Controlled Trials in Prosthetic Dentistry need to take into account Patient Preferences

Zelen design

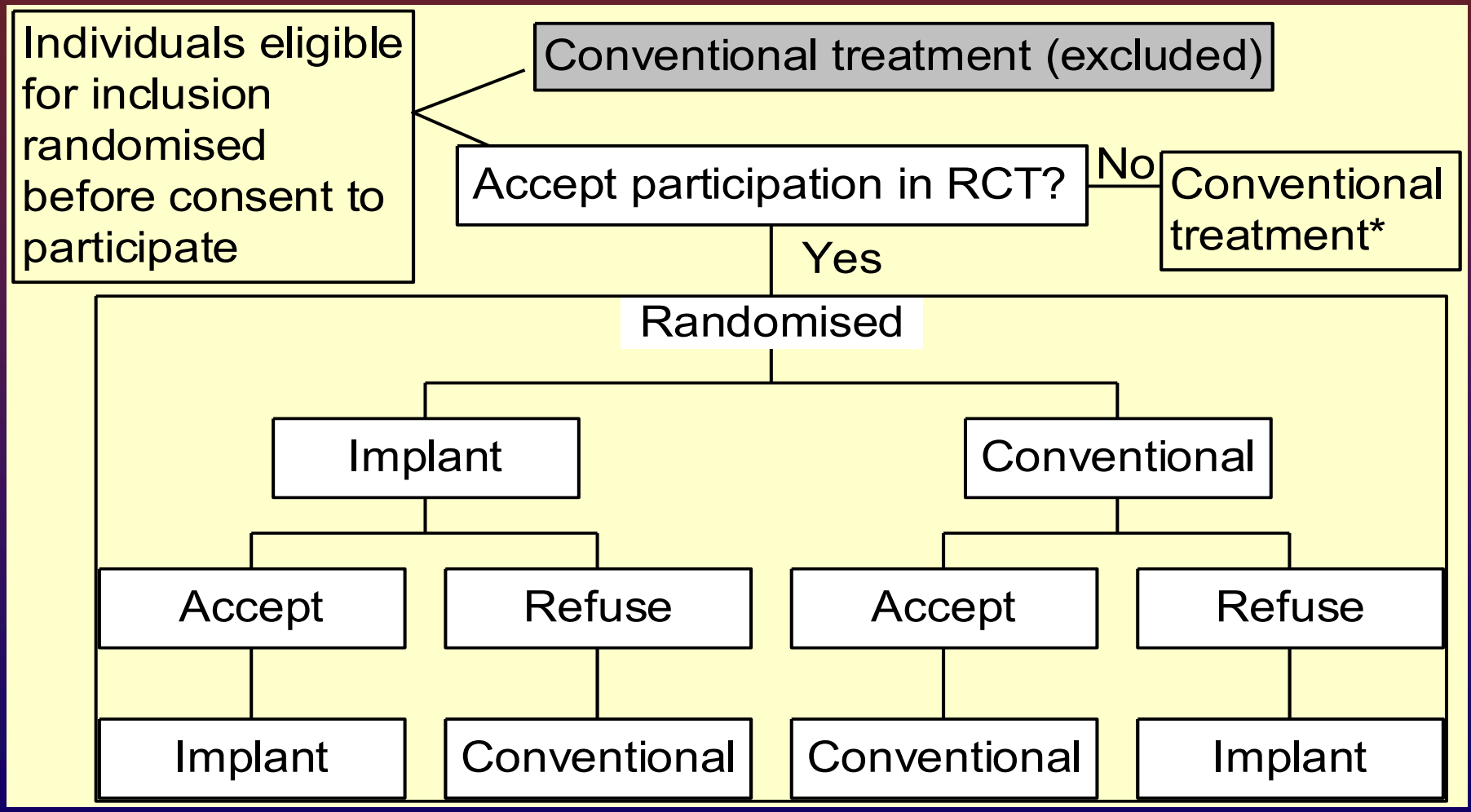
Zelen M. A new design for randomized controlled trials. N Engl J Med 1979; 300: 1242-45.



*** Given conventional treatment, but analysed as if they have received exp. treatm.**

Zelen double randomised consent design

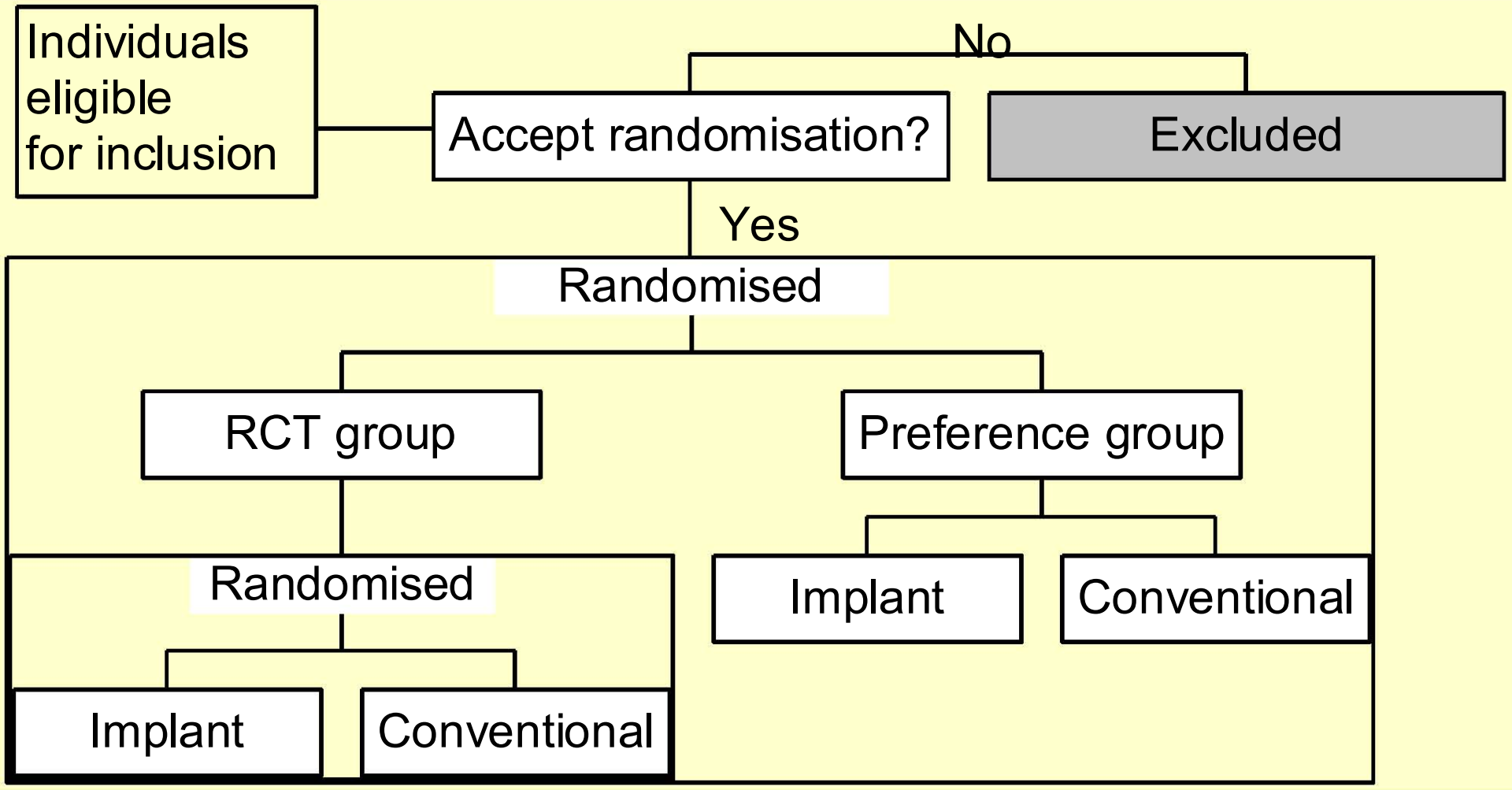
Ethical concerns overcome by offering the opportunity to switch to other group



*** Given conventional treatm., but analysed as if they have received exp. treatm.**

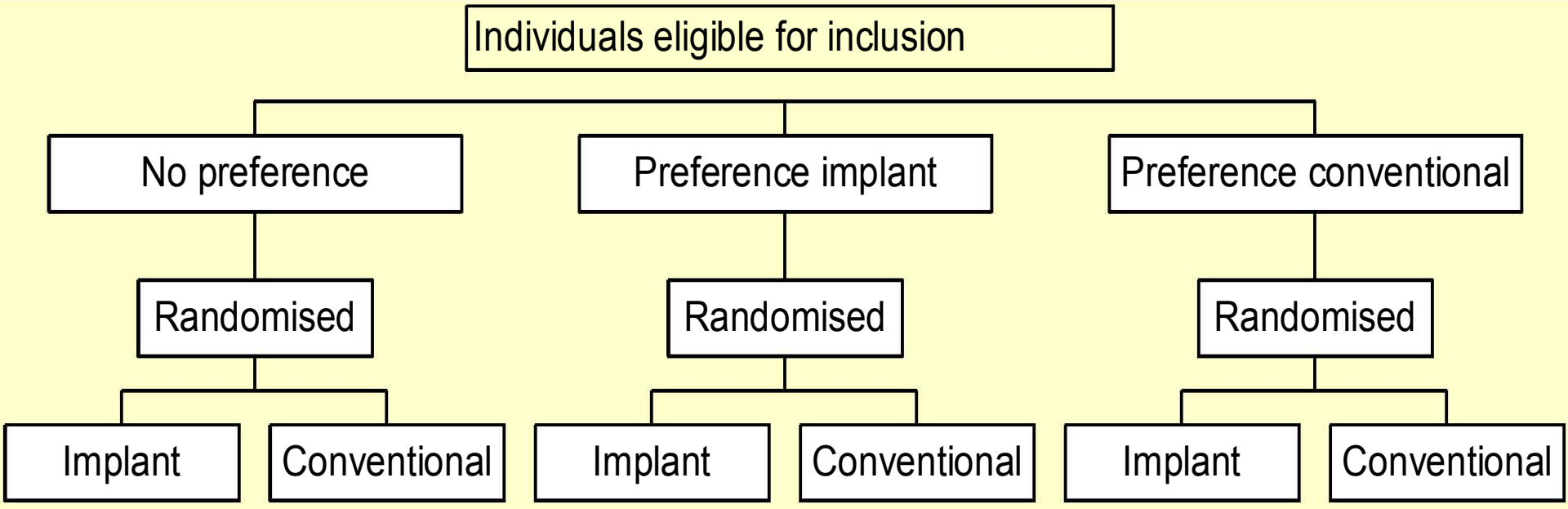
Wennberg design

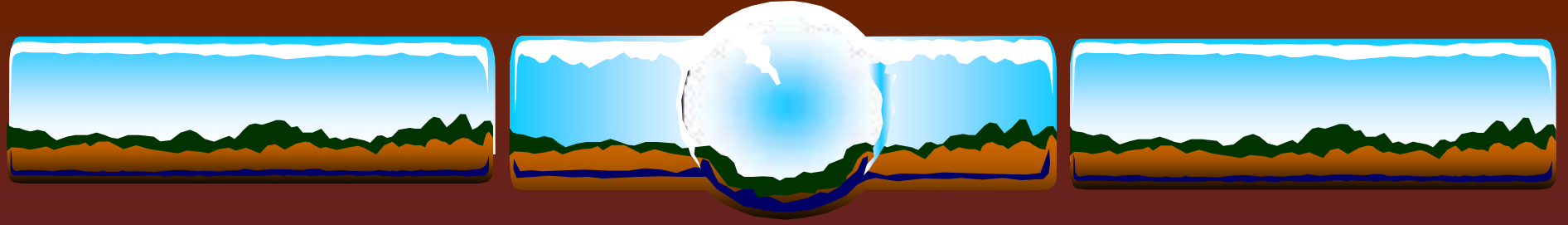
Include individuals who agree to be randomised



Feine & Awad design

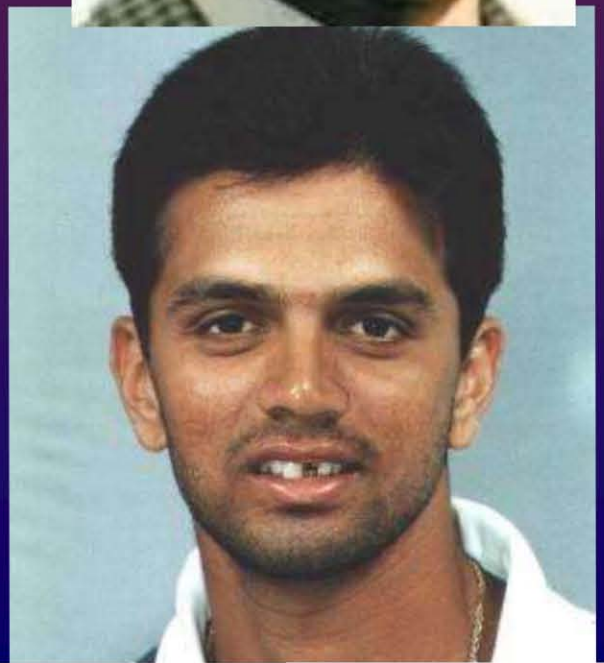
Feine J, Awad MA. Community Dent Oral Epidemiol 1998.





2. Uncertainty about best treatment in complex situations

Will identical treatment be given to these patients ?

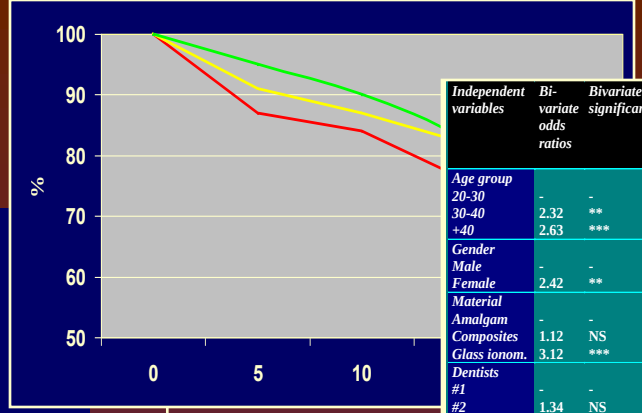


Choice of therapy – patient preferences

- Total rehabilitation or minimal solution?
- Demand for longevity, 1 y. - 30 yrs.?
- Risk attitude to iatrogenic damage, i.e. future prognosis of tooth?
- Demand for fixed (or removable) prosthetic solution?
- Expectance of treatment?
- Patient economy.

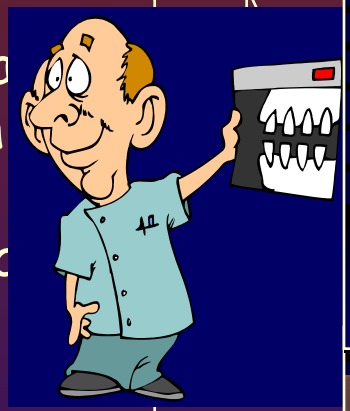
Correct treatment...

...for the right patient....

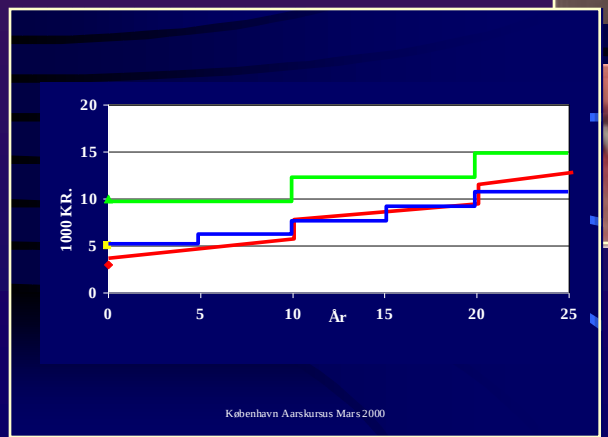


Independent variables	Bi-variate odds ratios	Bivariate significance	95% Confidence intervals bivariate odds ratios	Multi-variate odds ratios	Multivariate significance	95% Confidence intervals for multivariate odds ratios
Age group						
20-30	-	-	-	-	-	-
30-40	2.32	**	1.15 - 3.13	2.52	**	1.35 - 3.33
+40	2.63	***	1.43 - 3.08	2.63	***	1.83 - 3.8
Gender						
Male	-	-	-	-	-	-
Female	2.42	**	1.61 - 2.79	2.12	**	1.91 - 2.9
Material						
Amalgam	-	-	-	-	-	-
Composites	1.12	NS	0.13 - 1.56	1.42	NS	1.13 - 1.96
Glass ionom.	3.12	***	2.52 - 4.34	5.65	**	4.67 - 7.23
Dentists						
#1	-	-	-	-	-	-
#2	1.34	NS	0.35 - 1.61	1.04	NS	1.35 - 2.01
Location						
Mandible	-	-	-			
Maxilla	1.55	*	1.			

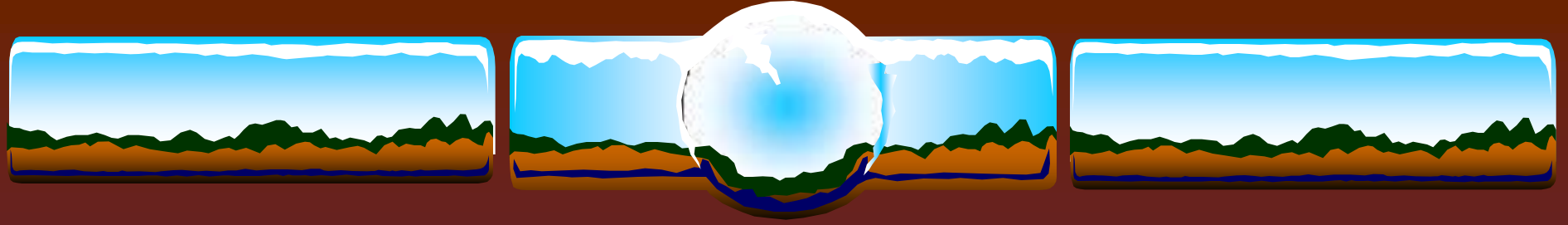
Dentist:pa
relationsh
Two-way
communica



København Aarskursus Mars 2000



København Aarskursus Mars 2000

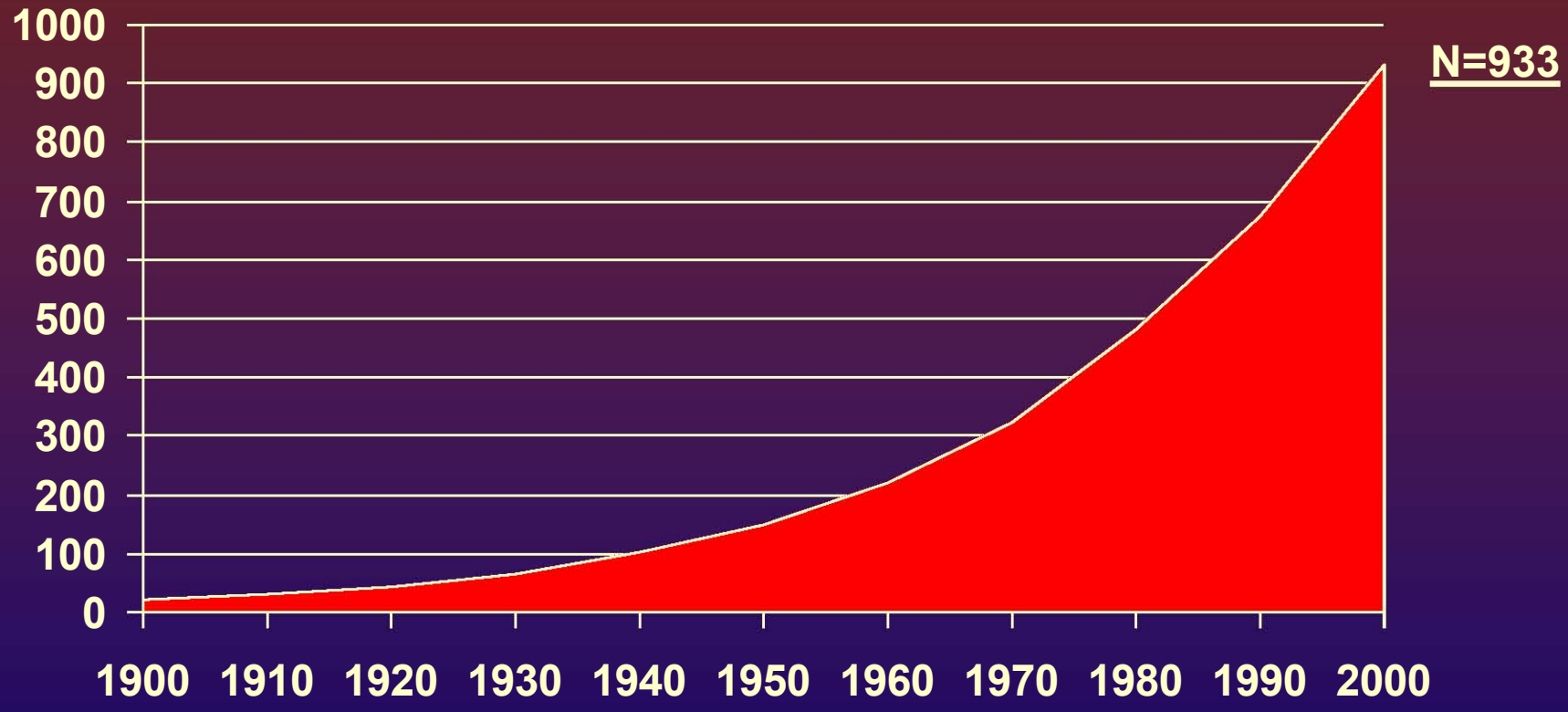


The explosion of information in society

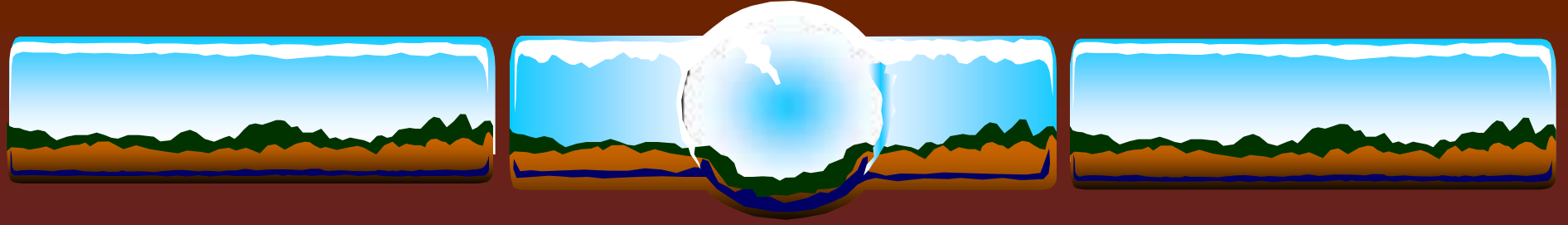
A rapidly changing society

- The production of new knowledge is at maximum in historical context
- Rapid changes of new ideas and concepts
- Information technology has improved the potential for information transfer to everybody
- Affects us all
  - Students and teachers
  - Patients
  - Researchers

Dental journals in circulation

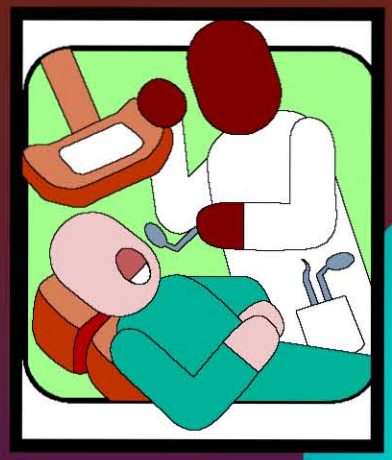


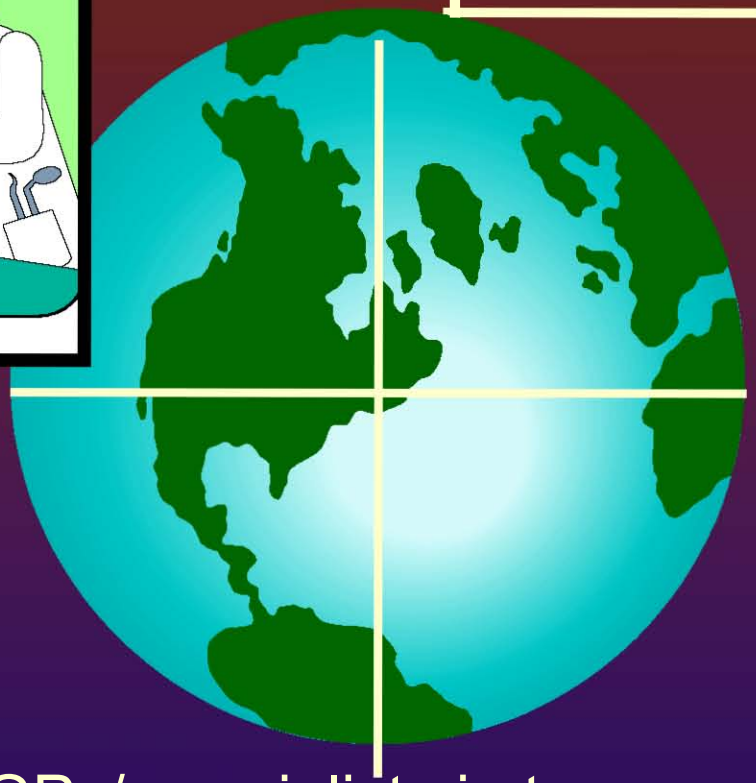
Source: Ulrich's International Periodicals Directory



Where and by who is new knowledge in oral sciences created?

The clinical practitioners





- Single handed GPs/ specialists in teams; secondary/tertiary care
- Great diversity of experience, interest and capacity
- Draw on a panoply of experience
- Pragmatism: what works - what creates problems

The researchers

- Creates “scientific evidence”
- Formulation of ideas, hypotheses, study design, data collection
- Peer review, internal/external validity, debates within paradigms
- Report findings in probabilities, not absolutes

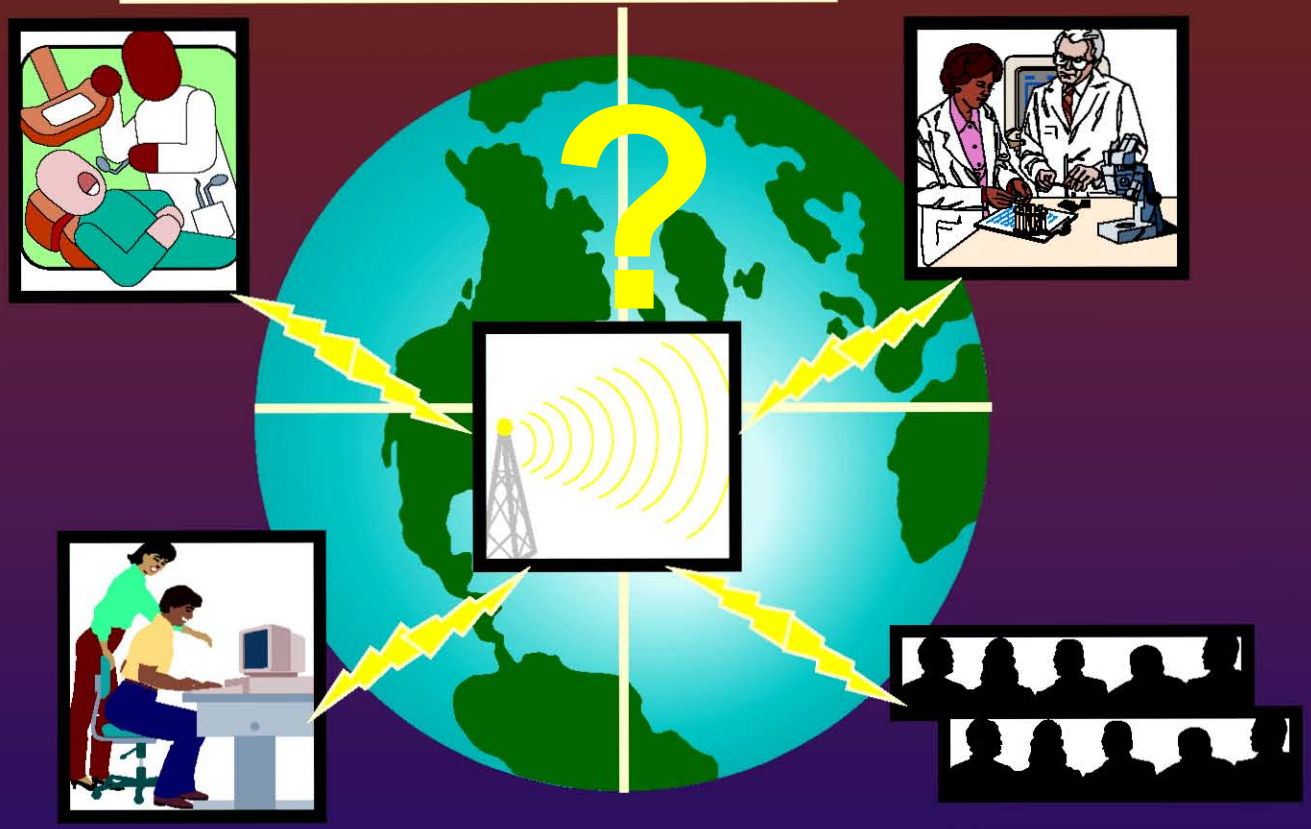
The appraisers of evidence for clinical practice

- Epidemiologists, health economists, statisticians, social scientists, and clinicians
- Collect, abstract and appraise practice related knowledge
- Debates about value and balance between consensus and evidence, rigour of data and application of statistics

Developers of local guidelines and protocols

- Local consensus, sometimes on national guidelines
- Clinical specialists seeking ways to influence peers

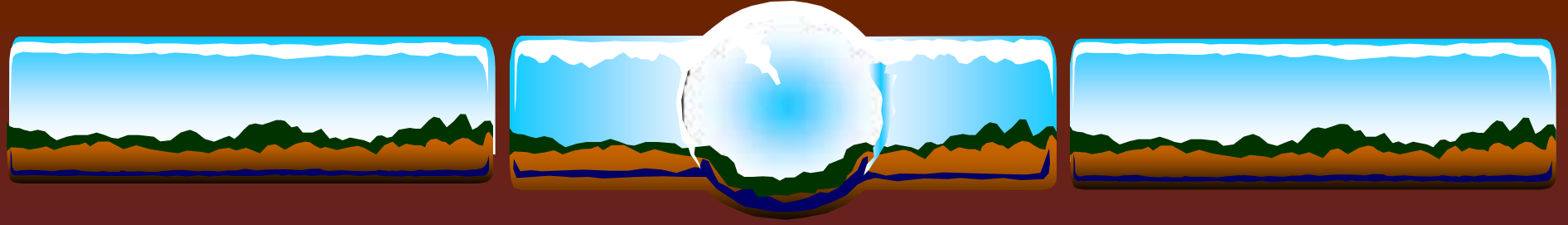
Advancement depends on good communication



BARRIERS: Ignorance-Defensiveness-Arrogance

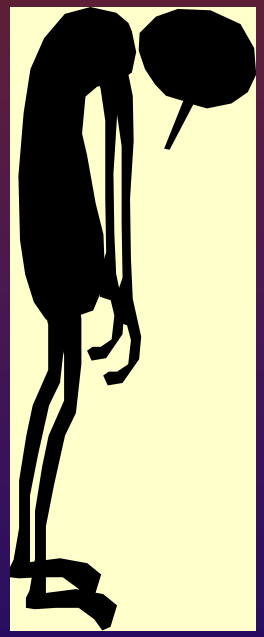
Different educational backgrounds, evaluation of best practice

Pressures, priorities, language, preoccupations



How will tomorrow's clinical practitioners be affected?

Dentists' environment: An information overload



Advertising
- producers
- colleagues

Dental literature

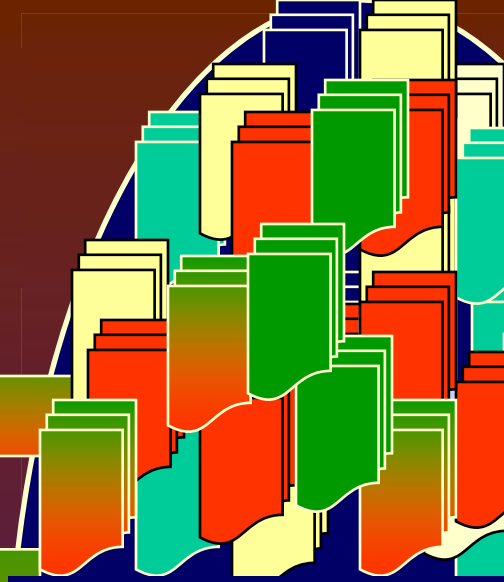
Meetings/ courses

Colleagues

WWW

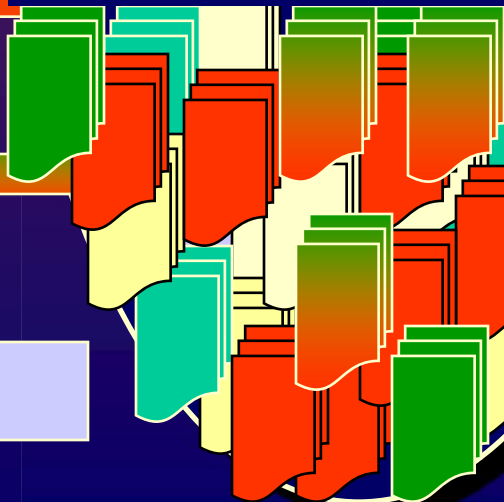
Patients & (-groups)

Popular magazines & Media



Dental 'science'

700 journals:
25 000 articles/y



More knowledgeable patients:

- ✓ **Patient communication!**
- ✓ Wish to remain sound, look healthy…. young
- ✓ Competitive health providers

We need to consider
not only the
amount
of information, but also
the
quality
of this information

Solution: Integrate evidence-based clinical practice

- A practical aspect
  - A strategy for solving clinical problems on a daily basis.
- An ethical aspect
  - A strategy for being reasonably certain that my advises and treatment are the best available to my patients.

Evidence based prosthodontics

Tentativ program for SSPD- møtet i Oslo 20-22 - Netscape

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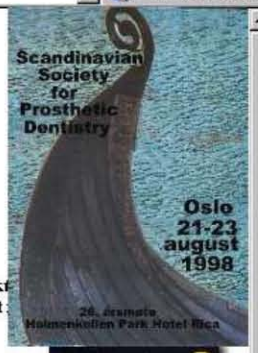
Bookmarks Location: http://www.odont.uio.no/prosthodont/oslo.htm What's Related

SSPD SCANDINAVIAN SOCIETY FOR PROSTHETIC DENTISTRY

Årsmøte 21-23.8.1998, Oslo



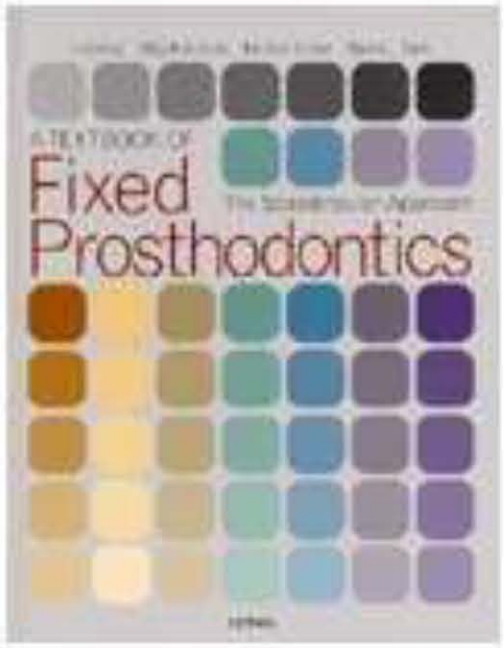
Kjære medlemmer og venner av SSPD!

Det er med glede vi inviterer dere til SSPDs årsmøte i Oslo 21-23 august 1998.

Møtet blir arrangert på Holmenkollen Park Hotel Rica

Hotellet er et meget kjent moderne konferansehotell i nærheten av Holmenkollen skianlegg. Fra Fornebu flyplass er det enklest å ta en taxi direkt
det utmerket kommunikasjon med bane. Vennligst merk at hotellreservasjonen skal sendes direkte til hotellet. Vi anbefaler å gjøre dette snarest
og blir fort fullbooket.

Prisen per rom pr. døgn inklusiv frokost er NOK 1095 for enkeltrom, og NOK 1195 for dobbeltrom.



årsmøtet vil fokusere på

EBHC- Evidence Based Health Care-

-applisert på fagområdet protetikk.

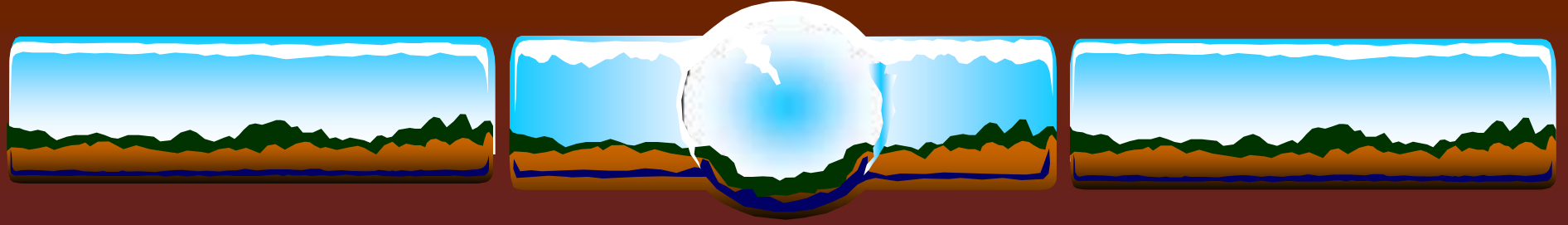
. Andy Oxmann som er co-director ved The Nordic Cochrane Centre, samt Professor William Shaw, editor i The Cochrane Oral
forelese om bakgrunnen for hvorfor EBHC blir et stadig viktigere tema innen all helseomsorg, og om hvordan ny kunnskap og
ne Cochrane Collaboration. William Shaw vil applisere EBHC-konseptet til aktuell odontologisk forskning og problemstillinger.
es på aktuelle problemstillinger innen protetikk og bittfunksjon. I to symposier vil det bli fokusert på det vitenskapelige fundament
v materialer i vår pasientbehandling. Vi har valgt ut en del problemstillinger som vi håper og tror vil vekke interesse. Med
mentasjon vil et selektert utvalg nordiske forelesere presentere det vitenskapelige fundament om emnene.
ere til Oslo

Velkommen!

Gudbrand Øilo

are in Prosthetic Dentistry

Viking2 - PhotoImpact SE



Where can the best evidence based resources be found?

FDI World Dental Federation

National and International Guidelines & Statements, Position papers, Proceedings, Systematic reviews, Meta-analyses

Patient issues			
Endocarditis	[World]	[FDI]	
Dental erosion	[World]	[FDI]	[FDI statement]
Disabled patients	[World]	[FDI]	
Emergency treatment	[World]	[FDI]	
Odontophobia, psychology, fear	[World]	[FDI]	
Oral mucosal problems	[World]	[FDI]	
Saliva and oral health	[World]	[FDI]	
Temporomandibular dysfunction	[World]	[FDI]	
Public health issues [Top]			

Year	Original title	Type	Country	Source	Publication	Author	http	ISBN	topi
2001	Recommendations for Using Fluoride to Prevent and Control Dental Caries in the United States	Review/guidelines	USA	CDC, Centers for Disease Control and Prevention	MMWR 50:(RR-14): 1-42		Center for Disease Control		fluorides
2001	Core messages in oral health education	ongoing project	International	FDI Commission project 97-06	Int Dent J 2000; 50; 3: 115-74	Clarkson J, Löe H, Sreebny LM, König K	Project details		fluoride prophylaxis diet caries
2001	Development and implementation of programs and policies for the prevention of oral diseases	Resource	USA	Association of State and Territorial Dental Directors (ASTDD)			Contact: ASTDD		prophylaxis fluoride ca sealant evi
2001	Fluoride - Seen from Different Perspectives. Workshop held on various topics related to fluoride in the light of changing conditions Nov 2000, Amsterdam	Proceedings	International		Caries Res 2001;35:supplement 1		Caries Res		fluoride
2001	Fluoride in restorative materials	ongoing project	International	FDI Commission project 97-08	Project in progress	Clarkson J, McConnell R, Burke F	Project details		restorative fluoride
2001	Topical fluoride for preventing dental caries in children and adolescents	Systematic Review	International	Cochrane Collaboration Library		Marinho VCC, Sheiham A, Logan S, Higgins JPT	Cochrane Collaboration [Password required]		fluoride prophylaxis
2001	Water Fuoridation	Resource	USA	National Center for Fluoridation Policy & Research			NCFPR		fluoride
2001	Optimal intake of fluoride	ongoing project	International	FDI Commission project 96-08	Project in progress	Clarkson J	Project details		fluoride
2000	Fluoride and Dental Caries	Statement	International	FDI General Assembly 2000	FDI World 2001; 10(3):		FDI statement		fluoride
2000	CDA Statement on Fluoridation	Statement	Canada	CDA, Canadian Dental Association			CDA-ADC		fluoride
2000	Oral Health in America: A Report of the Surgeon General	Review	USA	NIH, National Institutes of Health	NIH Publication No 00-4713	Satcher D	Surgeon General		epidemiolo fluoride ca tobacco ca perio-pub
2000	International Collaborative Research on Fluoride	Proceedings	USA	NIH, National Institutes of Health	J Dent Res 2000; 79(4): 893-904	Clarkson JJ, Hardwick K, Barmes D	J Dent Res		fluoride
2000	Fluoridation of Drinking Water: a Systematic Review of its Efficacy and Safety	Systematic Review/Guidelines	United Kingdom	NHS Centre for Reviews and Dissemination	CRD Report 18		NHS R&D		fluoride
1999	Utilisation du fluor chez les enfants: recommandations de l'European Academy for Paediatric Dentistry (EAPD). [Use of fluorides in children: recommendations of the European Academy for Pediatric Dentistry]	Guidelines	Belgium/Belgique	European Academy for Pediatric Dentistry	Rev Belge Med Dent 1999; 53: 318-24	Marks LA, Martens LC	UI: 99361395		fluoride
1999	Fluoridation of water supplies	Statement	International	IADR, International Association for Dental Research			IADR		fluoride
1999	Fluoride supplements and fluorosis: a meta-analysis	Meta-analysis	USA	University of Michigan	Community Dent Oral Epidemiol 1999; 27: 48-56	Ismail AI, Bandekar RR	UI: 99184730		fluoride
1999	Fluoridation	Review/Guidelines	Canada	Calgary Regional Health Authority			CRHA		fluoride
1999	Achievements in Public Health, 1900-1999: Fluoridation of Drinking Water to Prevent Dental Caries	Review	USA	CDC, Centers for Disease Control and Prevention	MMWR 48(41); 933-940		Center for Disease Control		fluorides

Thank you for your kind attention