

# Science in prosthodontic papers. A comparison of two prosthodontic journals.

**Asbjørn Jokstad**

**Institute of Clinical Dentistry, Faculty of Dentistry.  
University of Oslo, Norway.**

All slides are available on: <http://www.odont.uio.no/protetikk/icp01>

# Background and aim

Evidence of doing more good than harm depends on adequate study design<sup>1</sup>.

<sup>1</sup> *Sackett DL, Richardson WS, Rosenberg W, Haynes RB. Evidence-based Medicine. Churchill Livingstone, 2000.*

# Background and aim

A report presented at the ICP meeting in Stockholm in 1999 concluded that:

*The articles in Int J Prosthodontics present little evidence for documenting therapeutic benefits of clinical prosthodontic treatment.*

*Future appraisal of other journals will show if this situation reflects the state of science of prosthodontic research.”*

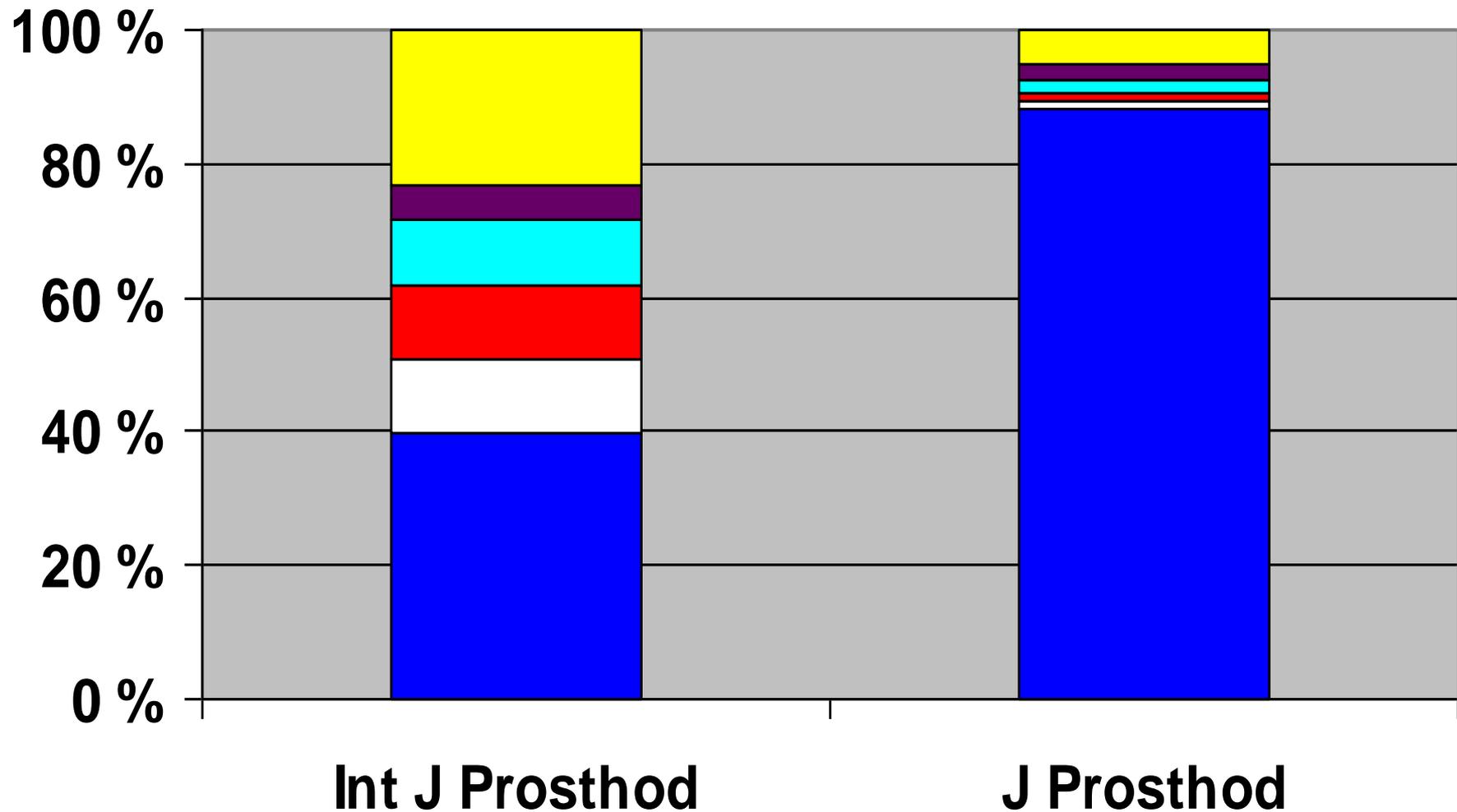
# Background and aim

The aim of the present review was to compare the characteristics of papers published in two influential refereed journals in prosthetic dentistry.

# Method

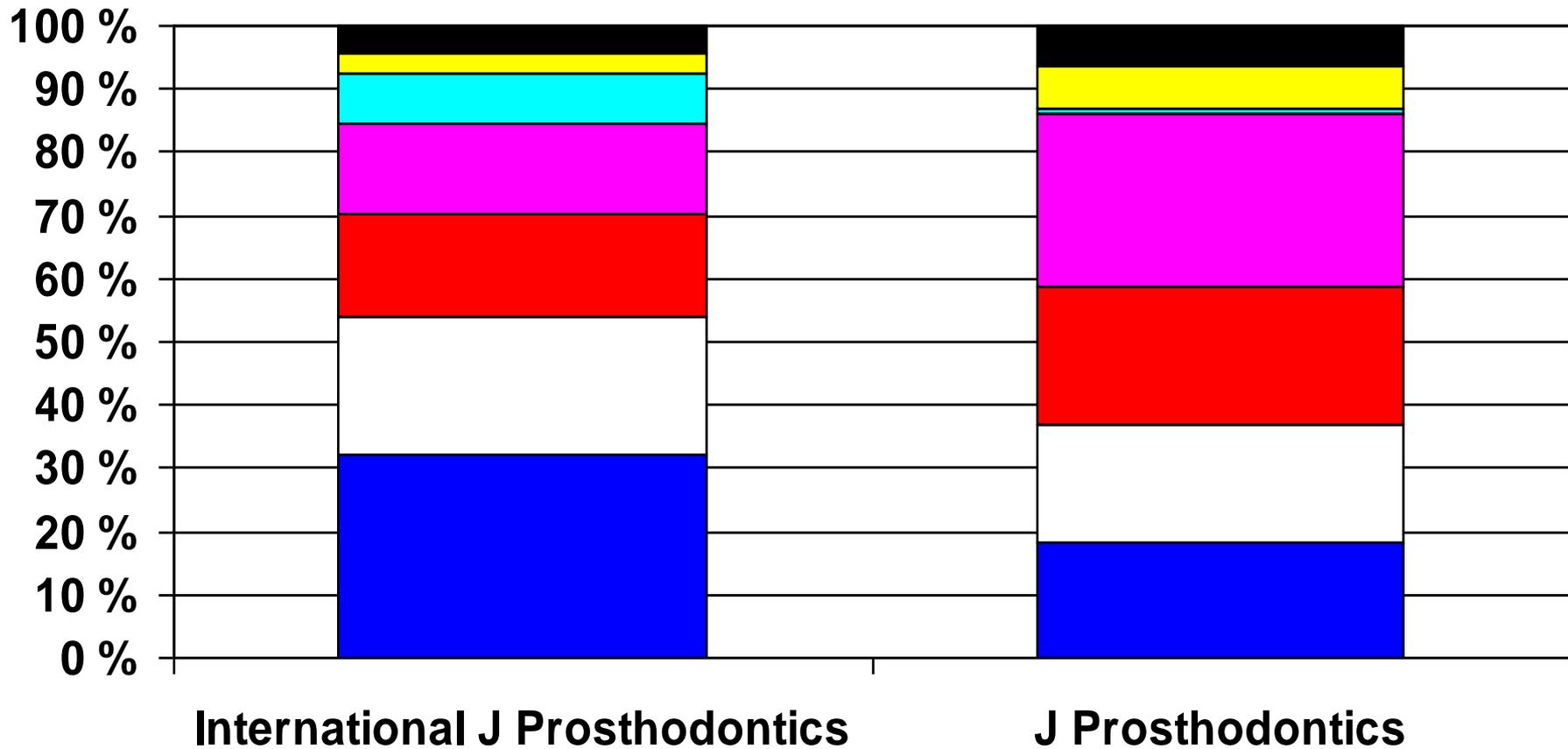
- ❖ All papers published in The *International Journal of Prosthodontics* (n=826) and in The *Journal of Prosthodontics* (n=305) have been appraised.
- ❖ The papers were categorised according to study design, description of clinical problem, and prosthodontic subtopic.
- ❖ Clinical studies were also characterised by the sample size and observation period.
- ❖ All variables were cross-tabulated to assess possible relationships.

# Contributors



■ USA □ UK ■ Japan ■ Scandinavia ■ Canada ■ Other

# Subtopics



■ Fixed

■ Implant

■ Function

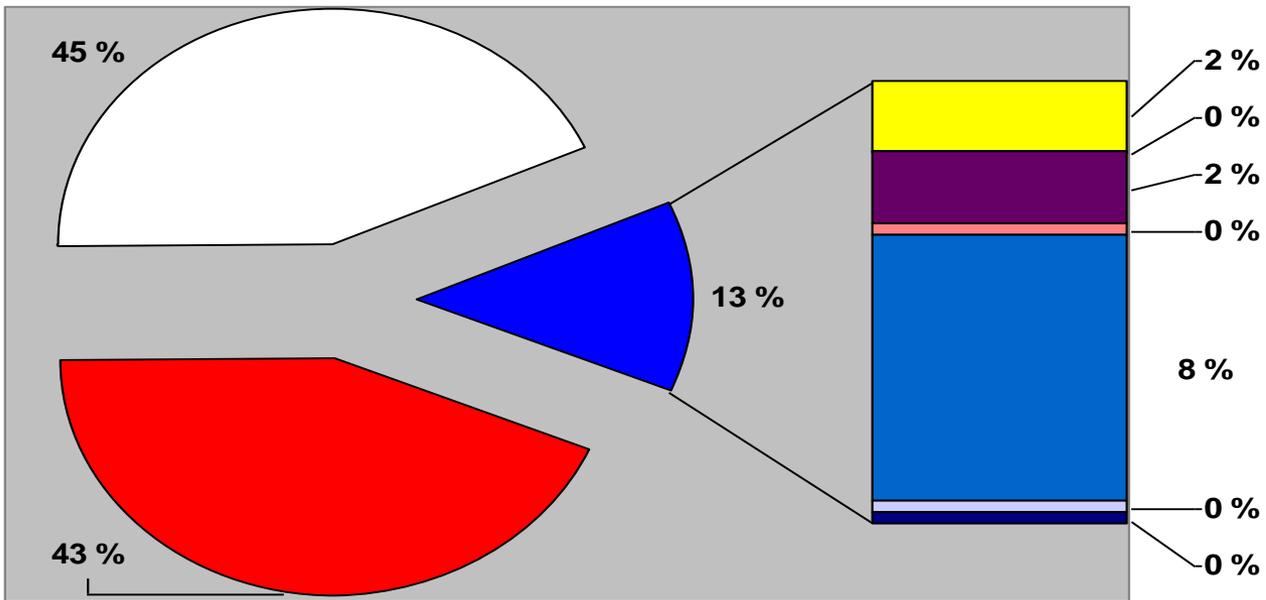
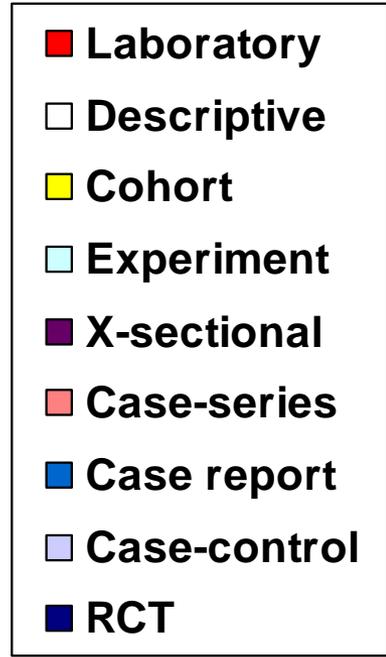
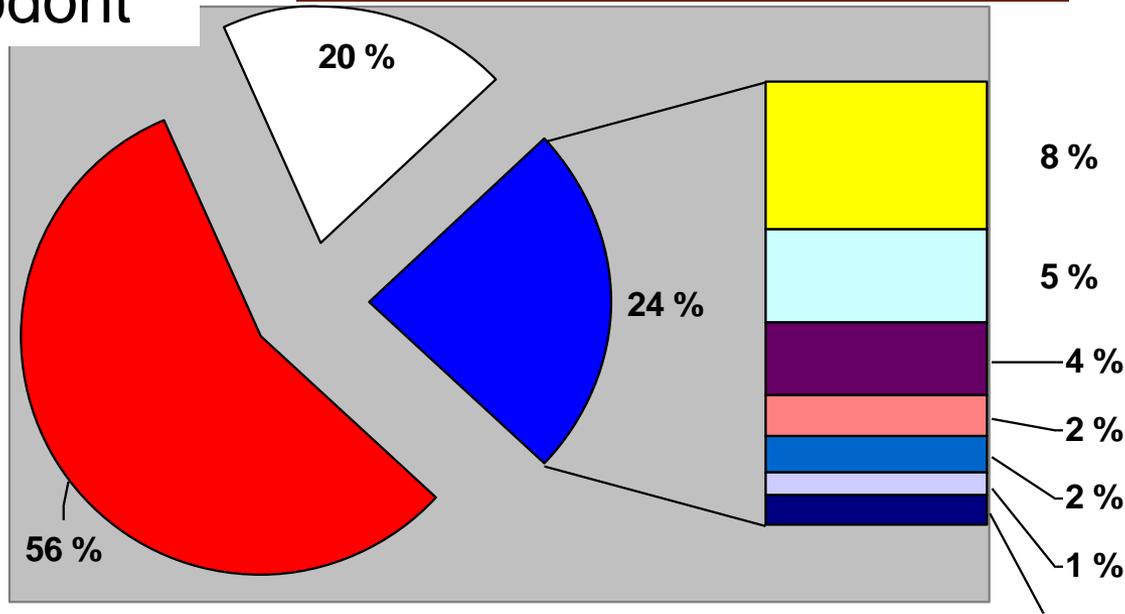
■ Non-prosthetics

□ Removable

■ Prosthetics-general

■ Maxillofacial p.

# Study design



## J Prosthodont

22 case reports  
 6 cohort studies  
 6 x-sectional studies  
 1 case-control study  
 1 RCT

# Clinical studies - design characteristics

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

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

# Study aims

## I. Educational

Self improvement; teaching; skill improvement

## II. Clinical problems

Therapy: process & outcomes; Prognosis

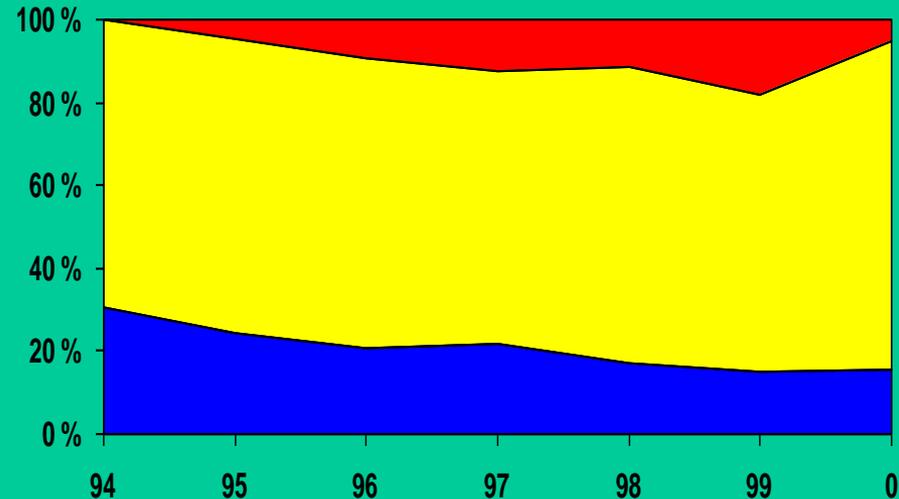
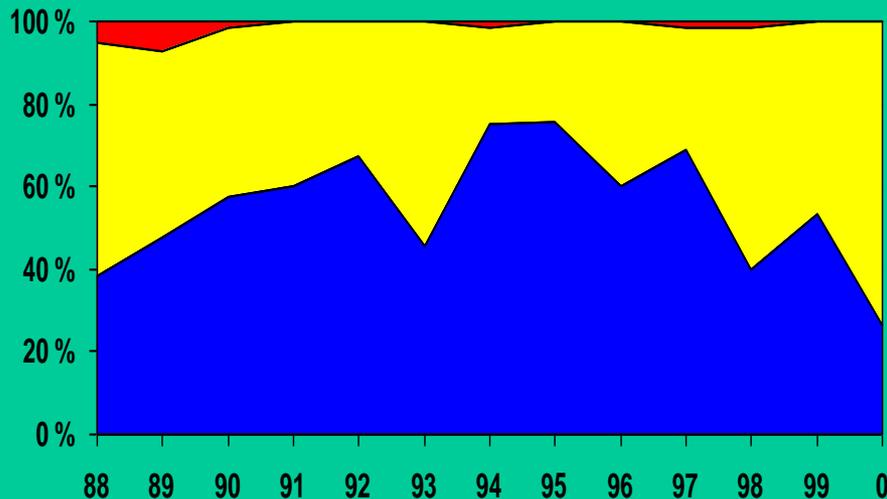
## III. Basic sciences

Chemistry; physics; physical-chemical properties

Biomechanics; fit accuracy; wear; stress

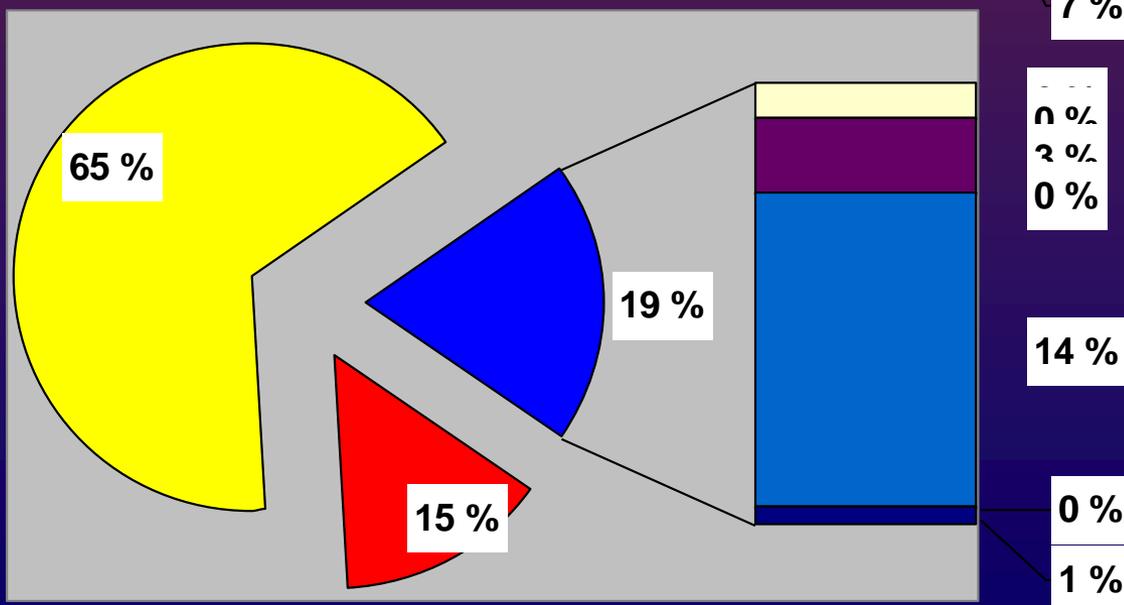
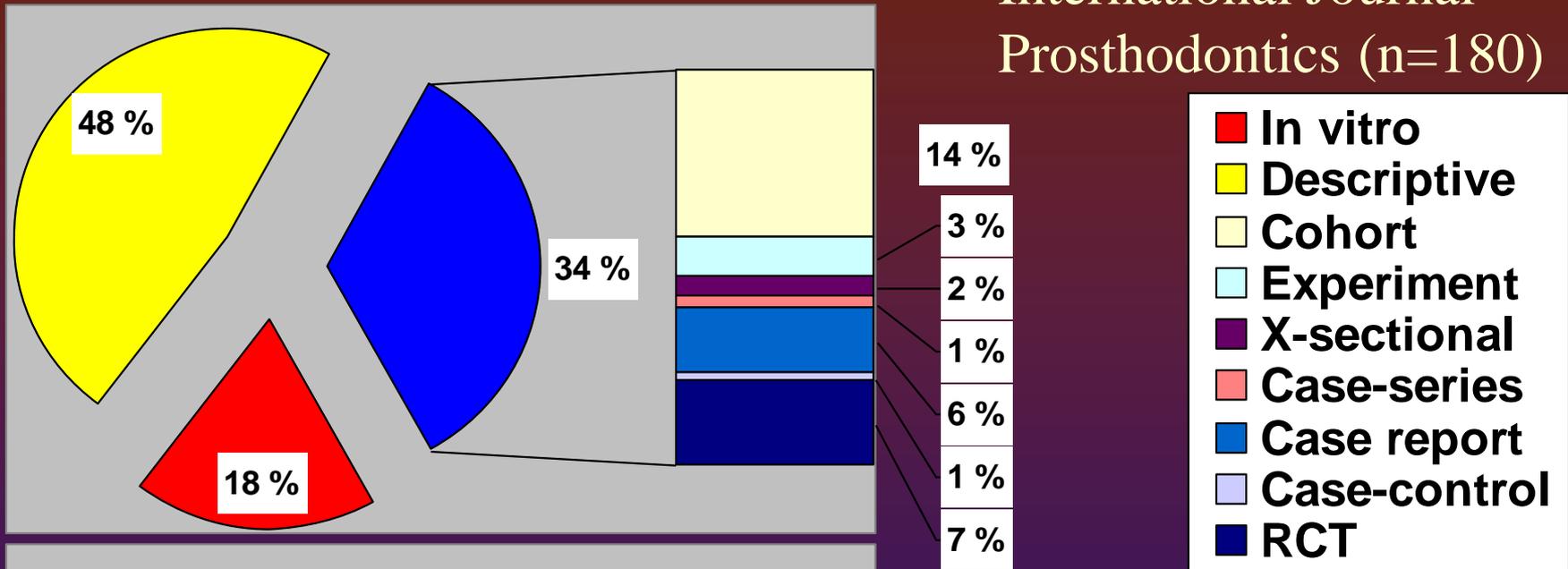
International Journal Prosthodontics

Journal of Prosthodontics



# Clinical problem vs. study design - Therapy

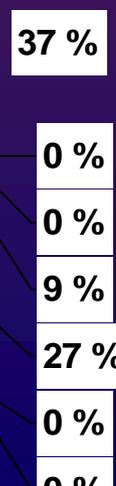
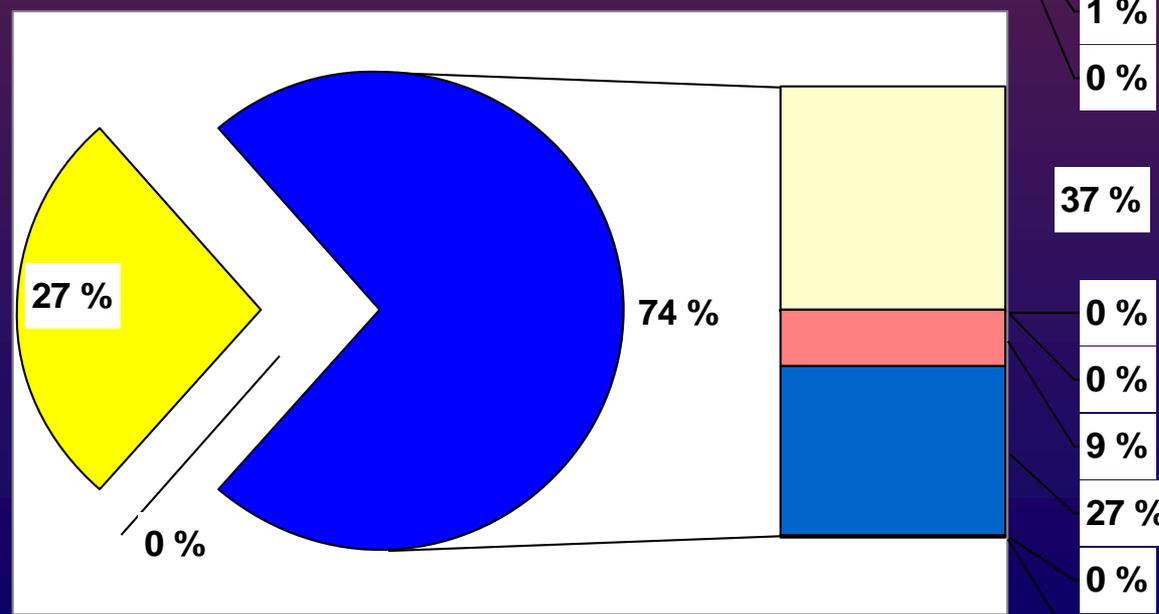
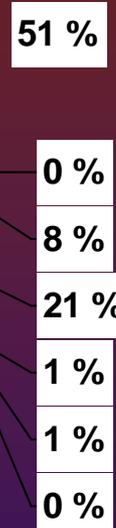
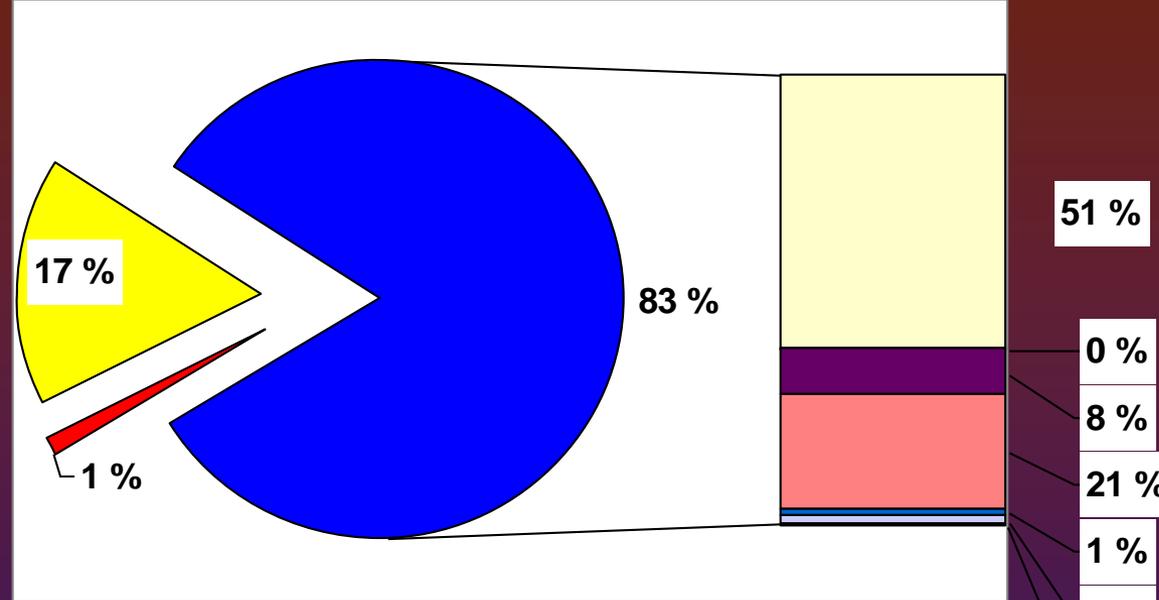
International Journal  
Prosthodontics (n=180)



Journal of  
Prosthodontics (n=124)

# Clinical problem vs. study design - Prognosis

International Journal  
Prosthodontics (n=72)



Journal of  
Prosthodontics (n=11)

# Conclusions 1/2



Emphasis in *Journal of Prosthodontics*, is mostly on descriptions of technique presentations and case reports, educational issues and review papers of the traditional type.



*International Journal of Prosthodontics* includes a higher proportion of reports based on well-designed clinical studies

BUT

# Conclusions 2/2

Both journals include:

Many papers with focus on:

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

Few papers with focus on:

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



Thank you  
for kind  
attention

All slides available on: <http://www.odont.uio.no/protetikk/icp01>