



Frequency of Citation Errors Among Male Sexual Medicine Publications in High-impact Urology Journals

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Introduction

- Citations are an essential characteristic of scientific literature
 - Give credit to prior work
 - Supports statements
 - Basis of recommendations / guidelines
 - Key measure of a journal's quality / impact factor
- Inappropriate use of citations
 - Misleading – intentional or not
 - Inaccurate – propagate further errors



Introduction

- Citation error rates in other disciplines 19-41%¹⁻⁷
- Error Categorization:
 - Bibliographic (62-92% of errors)
 - Typographical
 - Increase difficulty in linking true citation
 - Quotational (8-38% of errors)
 - Inconsistencies between statements and intent / content of reference
 - Weaken credibility and primary argument
 - Greater impact on relevant findings / statements
- Error rates are independent of impact factor



1 – Al-Benna S, et al: 2009 Burns; 2 – Davids JR, et al: 2010 J Bone Joint Surg AM; 3 – Fenton JE, et al: 2000 Clin Otolaryngol Allied Sci; 4 – Gosling CM, et al: 2004 Man Ther; Lukic IK, et al: 2004 Clin Anat; Luo M, et al: 2013 Foot Ankle Int; Reddy MS, et al: 2008 Surgeon.

Objectives

1. To review the number and types of citation errors occurring in sexual medicine articles
2. Evaluate for differences based on:
 - Journal type
 - Study type (meta-analysis vs original research)
 - Journal section



Methods

- Two sexual medicine articles each selected from:
 - European Urology
 - Journal of Urology
 - British Journal of Urology International
 - Journal of Sexual Medicine
- Selected from same month, where possible
- Random number generator if multiple available
- Original research or meta-analytic studies
- Reviewed for accuracy, relevance and congruence to the referent statement, and appropriateness of reference
- Did not review for typographical errors



Methods

Errors of Interpretation

- Discrepant Conclusions
- Discrepant Data
- Overstatement

Suboptimal References

- Inappropriate Reference
- Review Article Findings, Statement, and Summary
- Website Errors

Incorrect Reference

- Duplicate
- Unrelated Reference
- Unverifiable Statement
- Wrong Reference



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- Manuscript suggests that smoking is a risk factor.
- Cited study states that findings demonstrated that smoking was NOT a risk factor.



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- Article quotes an incidence of 0.8-1.5/100,000.
- Actual number from original manuscript is 0.34-0.52.



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- Article states that “only a few” patients will experience improvements in sexual / urinary functional status after 12 months.
- Cited article states that 41% will continue to recover continence beyond 12 months.



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- Article states that patients were stratified by D'Amico classification.
- Citation is for an article which also uses D'Amico classification, but not the original D'Amico paper itself.



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- Article states that 18-24 months are recommended for penile rehabilitation and cites a review article.
- The review article cites the correct reference; would have been preferable to directly cite the article in question.



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- The link to the website is not accurate, active, or links to the wrong page.



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- Reference #8 is cited in the text, #42 is not in text. In the bibliography, both are present and are the same reference.



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- Article states that quality of life measures become increasingly important to cancer survivors.
- Cited reference reviews rates of incontinence between various prostate cancer therapies. No mention of quality of life aspects, importance to patients, or anything else to support the statement.



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- References an abstract from a meeting
- Manuscript is a meta-analysis, and several of the abstracts cited were not subsequently published. Meta-analytic findings were based on data from those abstracts.



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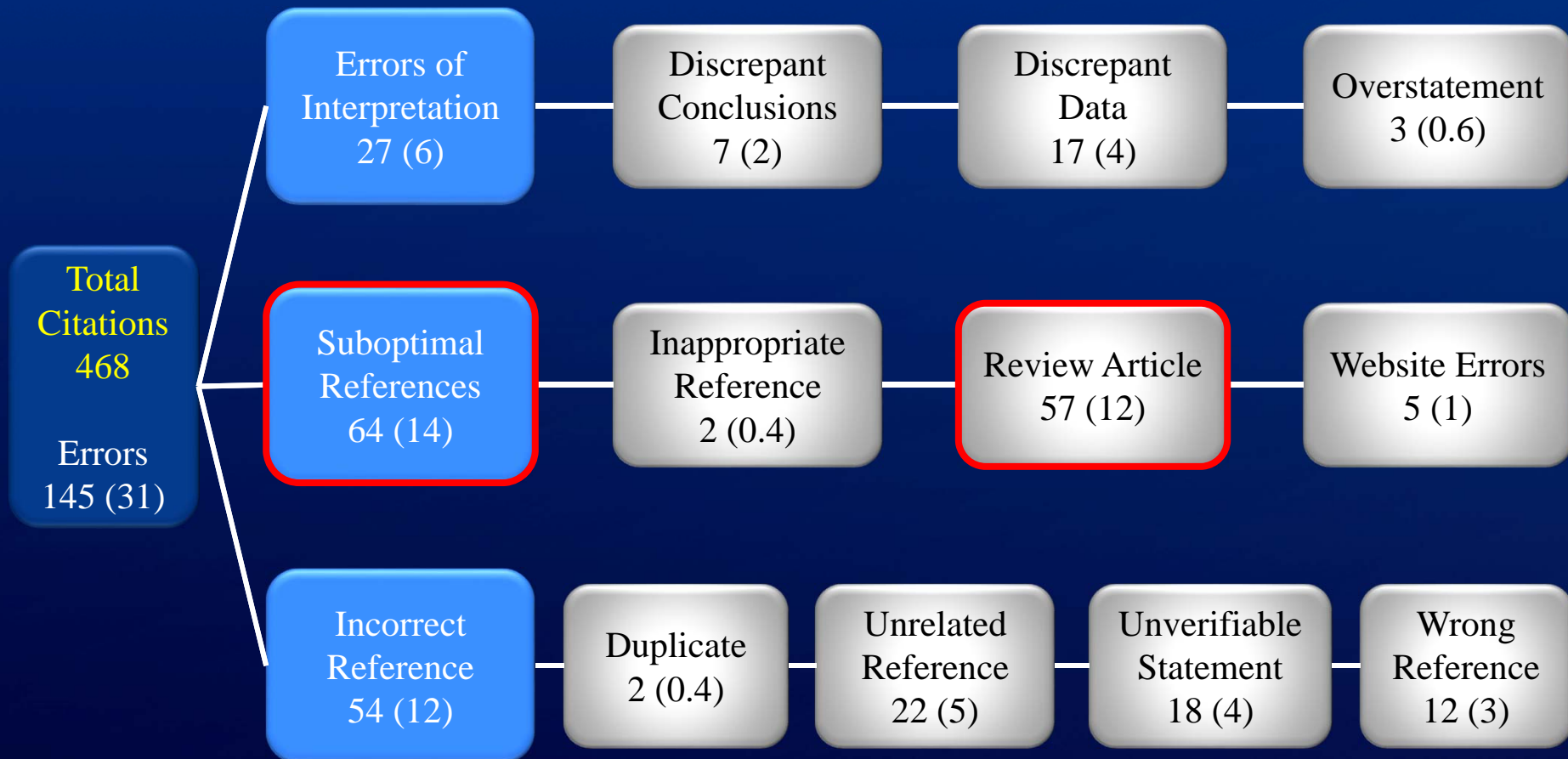
Incorrect Reference

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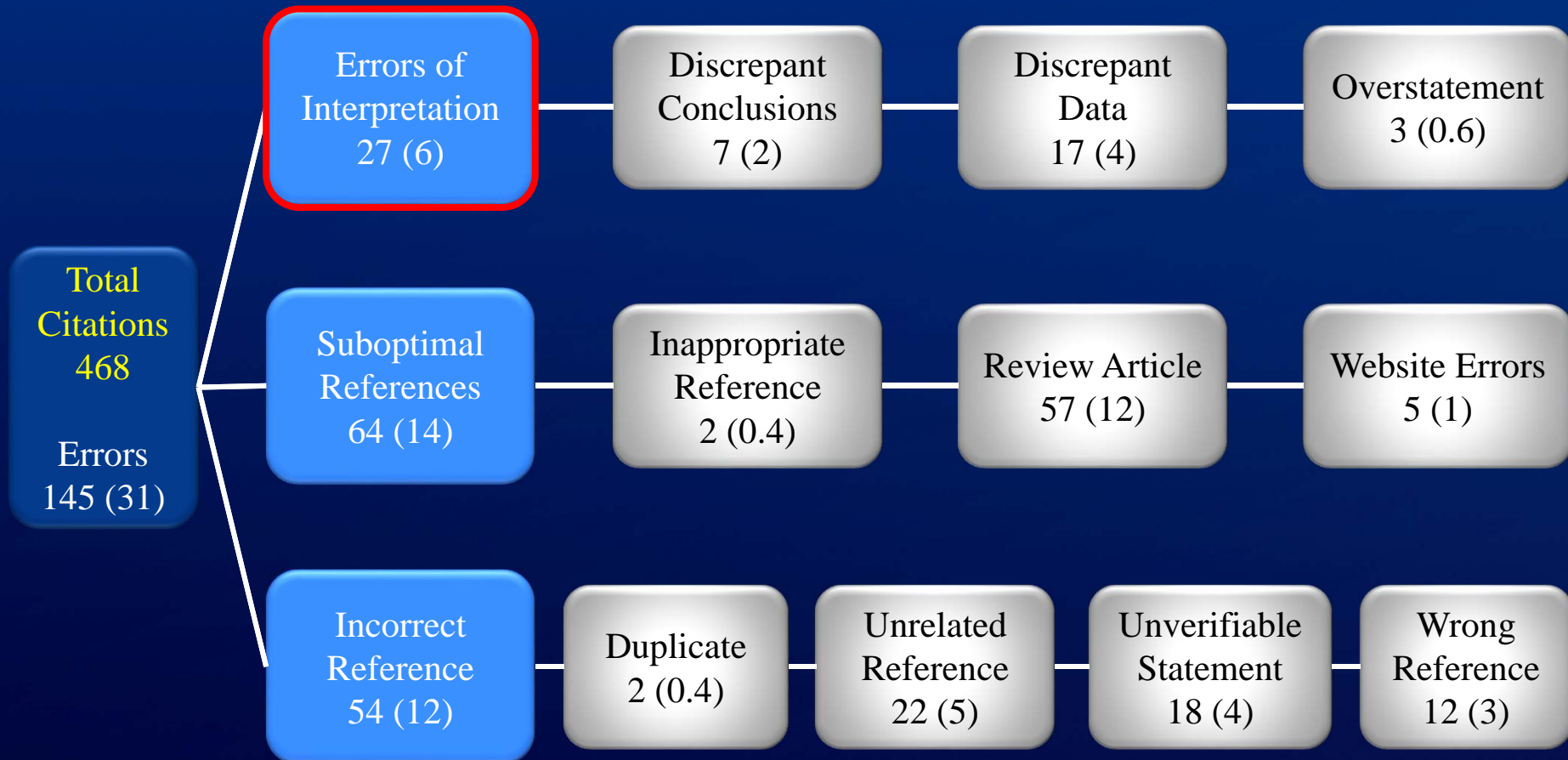
- Manuscript discusses systematic review for incontinence.
- Citation is for the same author, same year, but the wrong systematic review.



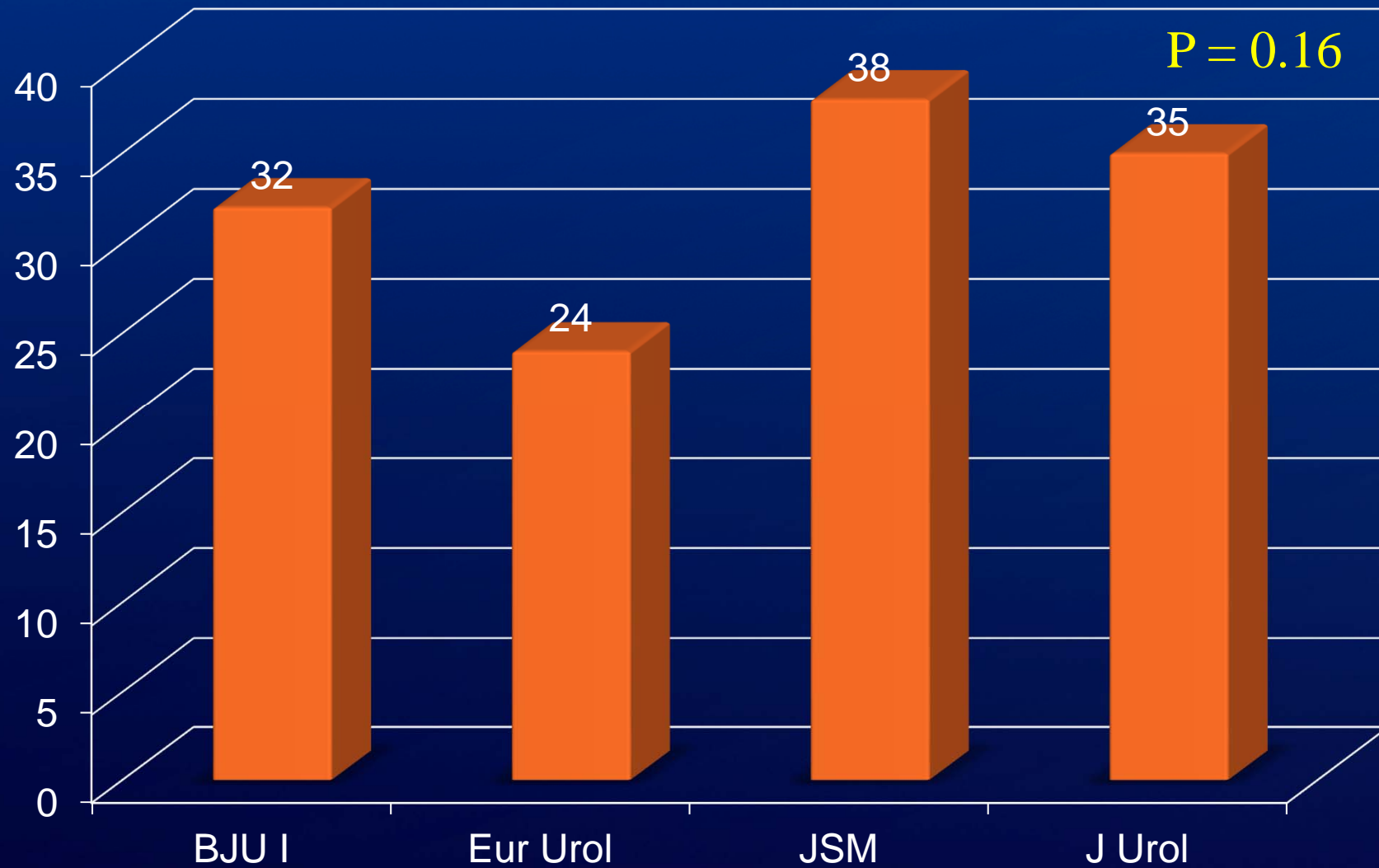
Results



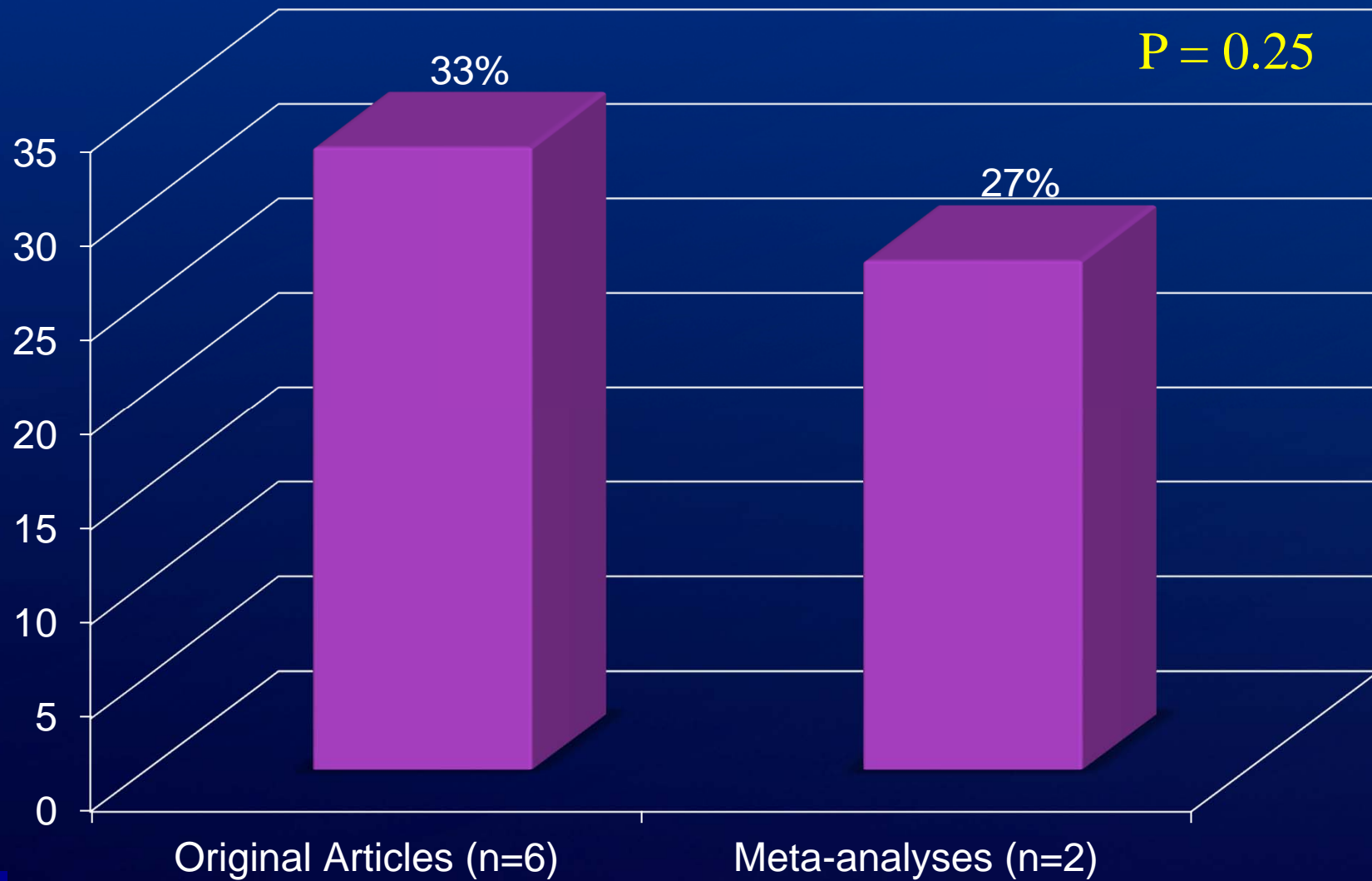
Results



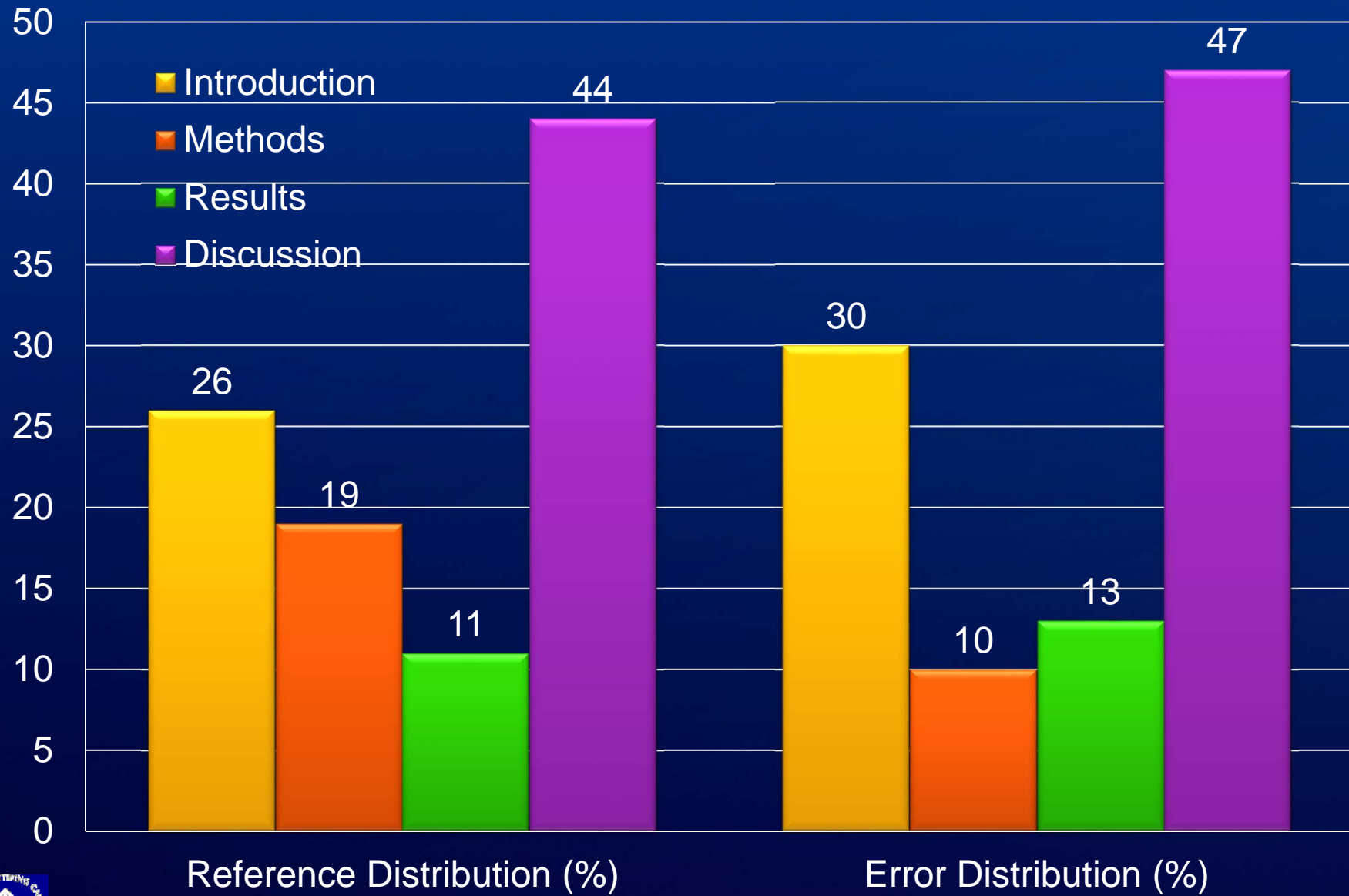
Results – Errors by Journal (%)



Results – Errors by Type of Article (%)



Results – Distribution of References and Errors



Conclusions

1. Citation errors are common among high impact-factor urology journals.
2. Although suboptimal and incorrect references are most common, errors of misinterpretation / misrepresentation are potentially most problematic.
3. Error rates are not significantly different among journal evaluated.



Thank You

