

CONTROVERSES ET ACTUALITÉS EN CHIRURGIE VASCULAIRE
CONTROVERSIES & UPDATES
IN VASCULAR SURGERY



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MARRIOTT RIVE GAUCHE & CONFERENCE CENTER PARIS, FRANCE

The dark side of Evidence Based Medicine

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Dark side EBM January 2014



Disclosure

Hervé Maisonneuve

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I have the following potential conflicts of interest to report:

- **Consultant in medical writing**
- **Editor of La Presse Médicale**
- **Editor of www.redactionmedicale.fr , a blog on medical writing**

The Medical Decision



Medical decision

Where to find the evidence? Evidence versus experts' opinions

**Best
external
evidence**

What is the value of journals we usually read?

What is the value of the few papers that are selected to produce clinical practice guidelines?

Quality of literature is poor

- Research reports are not available
- Articles published in peer-reviewed journals are used to assess the research data:
 1. Positive data are published many times when negative results are not published!
 2. Beautification of data is frequent: more than 50% of papers?
 3. Reproducibility of published data is very poor
 4. Conflicts of interests are poorly managed

Beautification in surgical RCTs

327 randomized controlled trials (2007/2012)

152 had a registered protocol before the end of the trial



January 2013;1-6

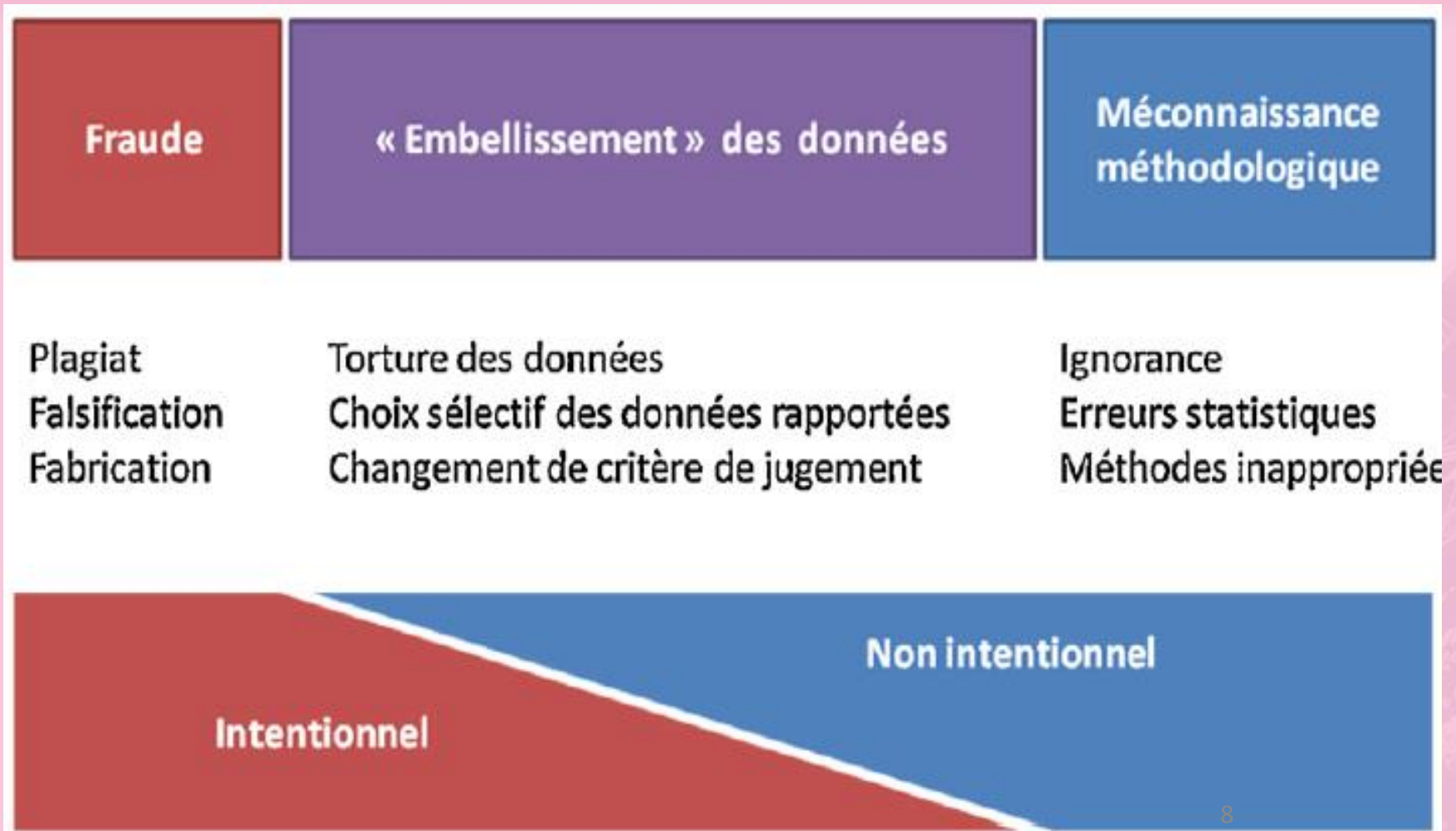
- 75 / 152 (49%) « *showed some evidence of discrepancies between outcomes registered and the outcomes published, most often related to omitting or introducing a primary outcome* »

Beautification: massage/torture of data

All

No. papers, n (%)	152 (100)
Number of papers with discrepancies between trial registration and publication, n (%)	75 (49.3)
Registered primary outcome reported as secondary outcome in text*	8 (5.3)
Registered primary outcome omitted in text*	32 (21.1)
New primary outcome introduced in text*	24 (15.8)
Published primary outcome described as secondary outcome in registry*	14 (9.2)
Different timing of assessment of primary outcome*	9 (5.9)
Papers with discrepancies in primary outcome favoring statistically significant results, n (%)	21 (28.0)

Beautification of RCTs' data*



* Seror R, Ravaud PH. Embellissement des données : fraude à minima, incompetence ou un mélange des deux. La Presse Médicale 2012, septembre

Reproducibility is very poor

OPEN ACCESS Freely available online

PLOS ONE

A Survey on Data Reproducibility in Cancer Research Provides Insights into Our Limited Ability to Translate Findings from the Laboratory to the Clinic

Aaron Mobley¹, Suzanne K. Linder², Russell Braeuer¹, Lee M. Ellis^{1,3*}, Leonard Zwelling^{4*}

237 (54,6 %) out of 434 physicians declared not being able to reproduce data published in high-impact journals

There are many objective data confirming poor reproducibility in fundamental research

Conflicts of interests

- Financial COIs: authors underdisclose
- Non-financial COIs: hidden schools of thought, and dominating mode of thinking

From Disclosure to Transparency

The Use of Company Payment Data

Susato Chémérois, PhD; Timothy Frosch, BA; David J. Rothman, PhD

SPECIAL ARTICLE

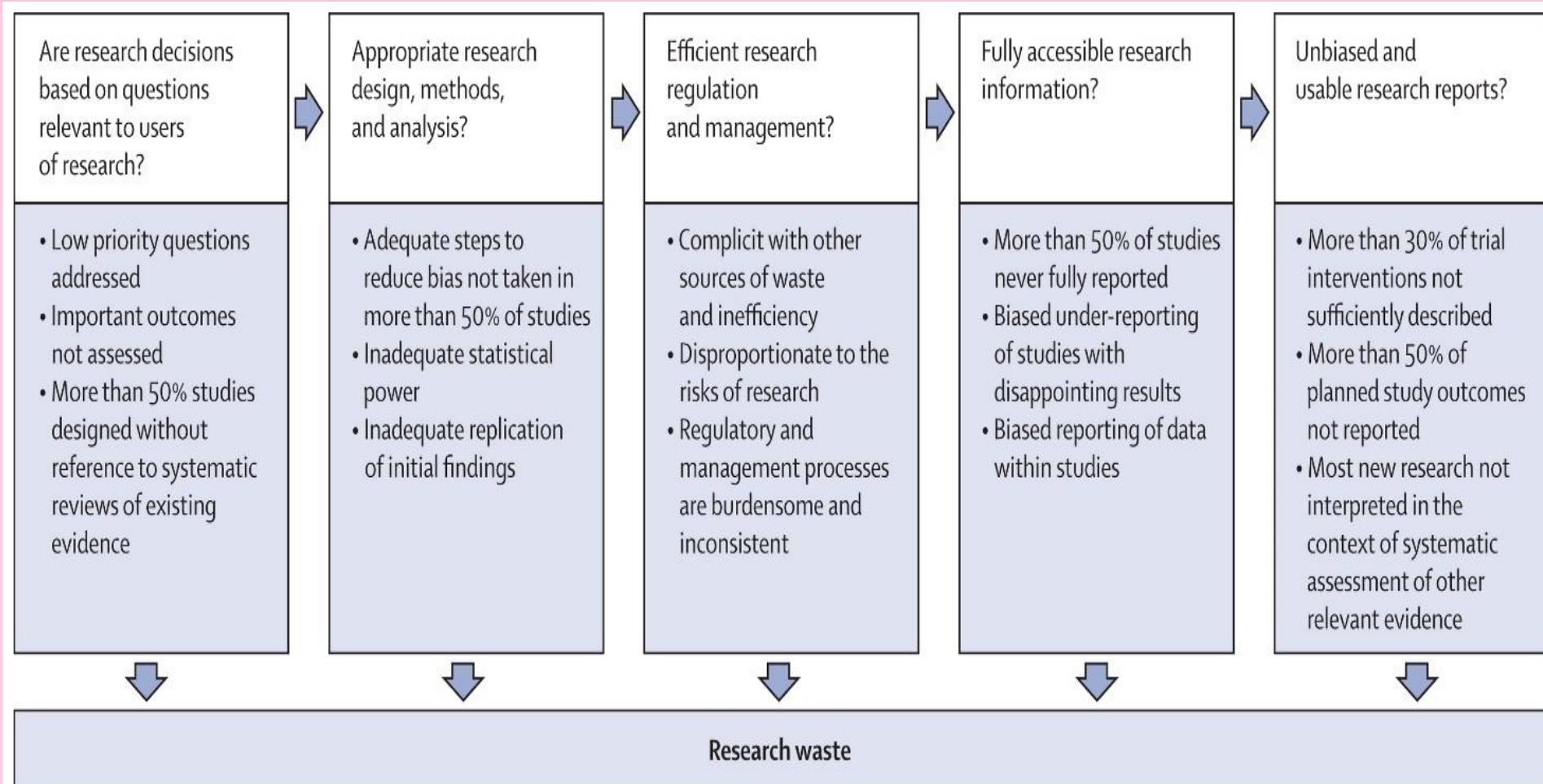
Arch Intern Med. 2011;171(1):81-86.

A Randomized Study of How Physicians Interpret Research Funding Disclosures

Aaron S. Kesselheim, M.D., J.D., M.P.H., Christopher T. Robertson, Ph.D., J.D.,

NEJM, 2012;367:1119

Research: Improve value, decrease waste



Series of 5 papers (10 pages/paper), Lancet, online first, January 8, 2014

Conclusion

Literature being flawed,
should experts' opinions be considered?
(if conflicts of interests are monitored)

EDITOR'S CHOICE

**Evidence based medicine: flawed
system but still the best we've got**

BMJ, 2014,
Jan 22

**EBM should not be
Evidence-B(i)ased-Medicine**

www.redactionmedicale.fr



Questions?