



equator
network

REWARD/EQUATOR 2015 Conference

Monday 28 Sept 2015

EQUATOR/EASE Expert Session: How to publish 'fit for purpose' research papers and make you journal stand out

EASE

How to implement effective interventions?

Ana Marušić, MD, PhD

University of Split School of Medicine, Split, Croatia

Editor in Chief, *Journal of Global Health*

President, European Association of Science Editors

Steering Group, EQUATOR Network

How to improve research papers (and increase journal quality)?

- Implementing reporting guidelines?
- Training authors/reviewers/editors?
- Influencing other stakeholders (funders, government, public)?

Implementing reporting guidelines – evidence

Turner L, Shamseer L, Altman DG, Weeks L, Peters J, Kober T, Dias S, Schulz KF, Plint AC, Moher D.

Consolidated standards of reporting trials (CONSORT) and the completeness of reporting of randomised controlled trials (RCTs) published in medical journals.

Cochrane Database Syst Rev. 2012 Nov 14;11:MR000030.

CONCLUSIONS:

The results of this review suggest that journal endorsement of CONSORT may benefit the completeness of reporting of RCTs they publish.

... despite relative improvements when CONSORT is endorsed by journals, the completeness of reporting of trials remains sub-optimal. Journals are not sending a clear message about endorsement to authors submitting manuscripts for publication.

Implementing reporting guidelines – evidence

Stevens A, Shamseer L, Weinstein E, Yazdi F, Turner L, Thielman J, Altman DG, Hirst A, Hoey J, Palepu A, Schulz KF, Moher D

Relation of completeness of reporting of health research to journals' endorsement of reporting guidelines: systematic review.

BMJ. 2014 Jun 25;348:g3804.

CONCLUSIONS:

Insufficient evidence exists to determine the relation between journals' endorsement of reporting guidelines and the completeness of reporting of published health research reports.

Journal editors and researchers should consider collaborative prospectively designed, controlled studies to provide more robust evidence.

Implementing reporting guidelines – evidence

Fuller T, Pearson M, Peters J, Anderson R.

What affects authors' and editors' use of reporting guidelines? Findings from an online survey and qualitative interviews.

PLoS One. 2015 Apr 15;10(4):e0121585.

RESULTS:

Four types of factors interacted to affect authors' and editors' likelihood of reporting guideline use:

1. individual (eg, having multiple reasons for use of reporting guidelines)
2. the professional culture in which people work
3. environmental (eg, policies of journals)
4. practical (eg, having time to use reporting guidelines)

Having multiple reasons for using reporting guidelines was a particularly salient factor in facilitating reporting guidelines use for both groups of participants.

Implementing reporting guidelines – evidence

Grindlay DJ, Dean RS, Christopher MM, Brennan ML.

A survey of the awareness, knowledge, policies and views of veterinary journal Editors-in-Chief on reporting guidelines for publication of research.

BMC Vet Res. 2014 Jan 10;10:10.

RESULTS:

35.1% respondents said their journal referred to reporting guidelines in its instructions to authors. CONSORT, REFLECT, and ARRIVE were the most frequently cited. 68.2% respondents believed that reporting guidelines should be adopted by all refereed veterinary journals.

Lack of knowledge, fear, resistance to change, and difficulty in implementation were perceived as barriers to the adoption of reporting guidelines by journals.

Implementing reporting guidelines – evidence

Wang X, Chen Y, Yang N, Deng W, Wang Q, Li N, Yao L, Wei D, Chen G, Yang K.

Methodology and reporting quality of reporting guidelines: systematic review.

BMC Med Res Methodol. 2015 Sep 22;15(1):74.

CONCLUSIONS:

Only few guidelines were developed complying with the Guidance.
More attention should be paid to the quality of reporting guidelines.

Guidance: Simera I, Altman DG, Moher D, Schulz KF, Hoey J. Guidelines for reporting health research: the EQUATOR network's survey of guideline authors. PLoS Med. 2008;5(6):e139.

Implementing reporting standards: experience from a journal

Journal of Pediatric Surgery (2006) **41**, 4–6



ELSEVIER

Journal of
**Pediatric
Surgery**

www.elsevier.com/locate/jped surg

Editorial

**A new standard for reporting clinical research in the
*Journal of Pediatric Surgery***

Implementing reporting standards: experience from a journal

Table 1 Guidelines for the reporting of clinical research data in the *Journal of Pediatric Surgery*

<i>Methods:</i>				
Reported	Not Applicable	Reporting detail		
<input type="checkbox"/>	<input type="checkbox"/>	The number and practice type of all institutions where cases were performed		
<input type="checkbox"/>	<input type="checkbox"/>	The number of surgeons who actually operated in the study (& the relative number of cases for each).		
<input type="checkbox"/>	<input type="checkbox"/>	The prior experience of participating surgeons in performing the reported intervention		
<input type="checkbox"/>	<input type="checkbox"/>	The precise timeline during which all patients were treated in the study (e.g. Jan 1995 to March 1998)		
<input type="checkbox"/>	<input type="checkbox"/>	<i>Results:</i>		
Reported	Not Applicable	Reported	Not Applicable	Reporting detail
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The range and mean of all relevant demographic and baseline variables
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The range and median (not mean) for length of follow-up reporting
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Relevant outcome variables are presented with appropriate measures of range and variability
<input type="checkbox"/>	<input type="checkbox"/>	<i>Additional details for studies reporting more than one treatment group (e.g. controls):</i>		
Reported	Not Applicable	Reported	Not Applicable	Reporting detail
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Mean and range for all relevant demographic and baseline variables for all treatment groups.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The range and median (not mean) for length of follow-up reporting for each treatment group.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A precise timeline during which all patients were treated for each group
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Outcome variables being compared between groups are presented with appropriate measures of variability (e.g. standard deviation)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Measures of type II error (P-values) for comparison statistics are presented with actual values if $P = .01$ or larger (e.g. $P = NS$ and $P < .05$ are not acceptable)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A description of how patients were selected into each treatment group
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A statement is made as to whether the same surgeons operated on patients from different treatment groups

Implementing reporting standards: experience from a journal

Journal of Pediatric Surgery (2011) 46, 131–137



ELSEVIER

Journal of
Pediatric
Surgery

www.elsevier.com/locate/jped surg

Results of a longitudinal study of rigorous manuscript submission guidelines designed to improve the quality of clinical research reporting in a peer-reviewed surgical journal

Kathryn E. Wynne^a, B. Joyce Simpson^a, Loren Berman^a, Shawn J. Rangel^b,
Jay L. Grosfeld^c, R. Lawrence Moss^{a,*}

^a*Department of Surgery, Yale School of Medicine, New Haven, CT, USA*

^b*Department of Surgery, Children's Hospital, Boston, MA, USA*

^c*Department of Surgery, Indiana University School of Medicine, IN, USA*

Implementing reporting standards: experience from a journal

Mean global composite scores increased from 72.2 pre-Guidelines to 80.1 post-Guidelines ($P < 0.0001$).

Scores increased in each subcategory:

Methods, 71.9 to 78.6 ($P < 0.0001$)

Results, 77.2 to 83.0 ($P = 0.002$)

Post-Guidelines implementation scores have increased over time.

Training authors/reviewers/editors – evidence

Galipeau J, Moher D, Campbell C, Hendry P, Cameron DW, Palepu A, Hébert PC.

A systematic review highlights a knowledge gap regarding the effectiveness of health-related training programs in journalology.

J Clin Epidemiol. 2015 Mar;68(3):257-65.

OBJECTIVES:

To investigate whether training in writing for scholarly publication, journal editing, or manuscript peer review effectively improves educational outcomes related to the quality of health research reporting.

CONCLUSIONS:

Included studies were generally small and inconclusive regarding the effects of training of authors, peer reviewers, and editors on educational outcomes related to improving the quality of health research. Studies were also of questionable validity and susceptible to misinterpretation because of their risk of bias.

Training authors/reviewers/editors – evidence from RI interventions

Marušić A, Wager E, Utrobičić A, Rothstein HR, Sambunjak D.

Interventions to prevent misconduct and promote integrity in research and publication

Cochrane systematic review, submitted

Impact of research integrity interventions at 4 levels: 1) organizational change attributable to intervention, 2) behavioural change, 3) acquisition of knowledge/skills, and 4) modification of attitudes/perceptions.

The evidence-base relating to research integrity is incomplete and hard to synthesize. There is little evidence that training in responsible conduct of research is effective in reducing research misconduct, except for some evidence that training about plagiarism, especially if it involves practical exercises and use of text-matching software, may reduce the occurrence of plagiarism.

Training authors/reviewers/editors – tools?

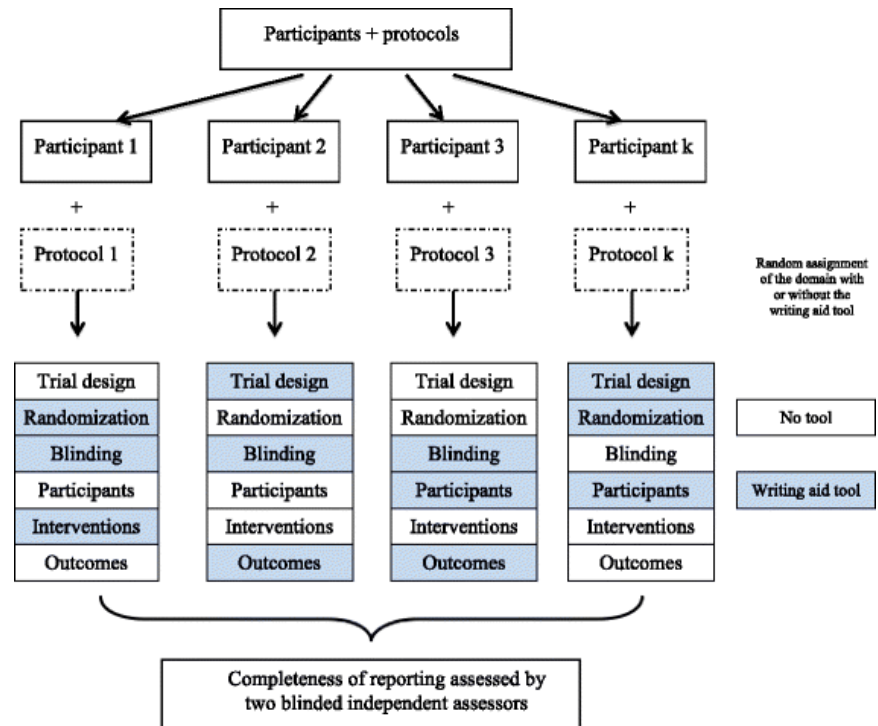
Barnes C, Boutron I, Giraudeau B, Porcher R, Altman DG, Ravaud P.

Impact of an online writing aid tool for writing a randomized trial report: the COBWEB (Consort-based WEB tool) randomized controlled trial.

BMC Med. 2015 Sep 15;13(1):221.

CONCLUSIONS:

Use of the WAT could improve the completeness of manuscripts reporting the results of RCTs.

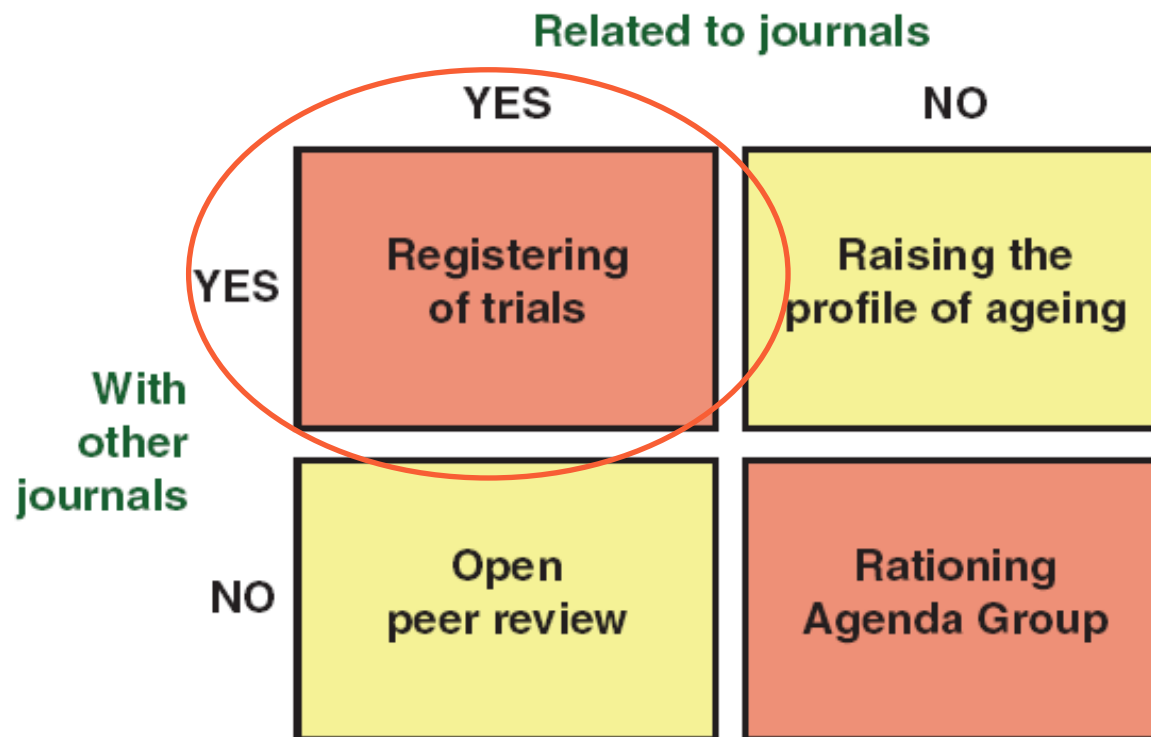


Influencing other stakeholders?

Can medical journals lead or must they follow?

Richard Smith

MJA • Volume 183 Number 11/12 • 5/19 December 2005



Influencing other stakeholders?

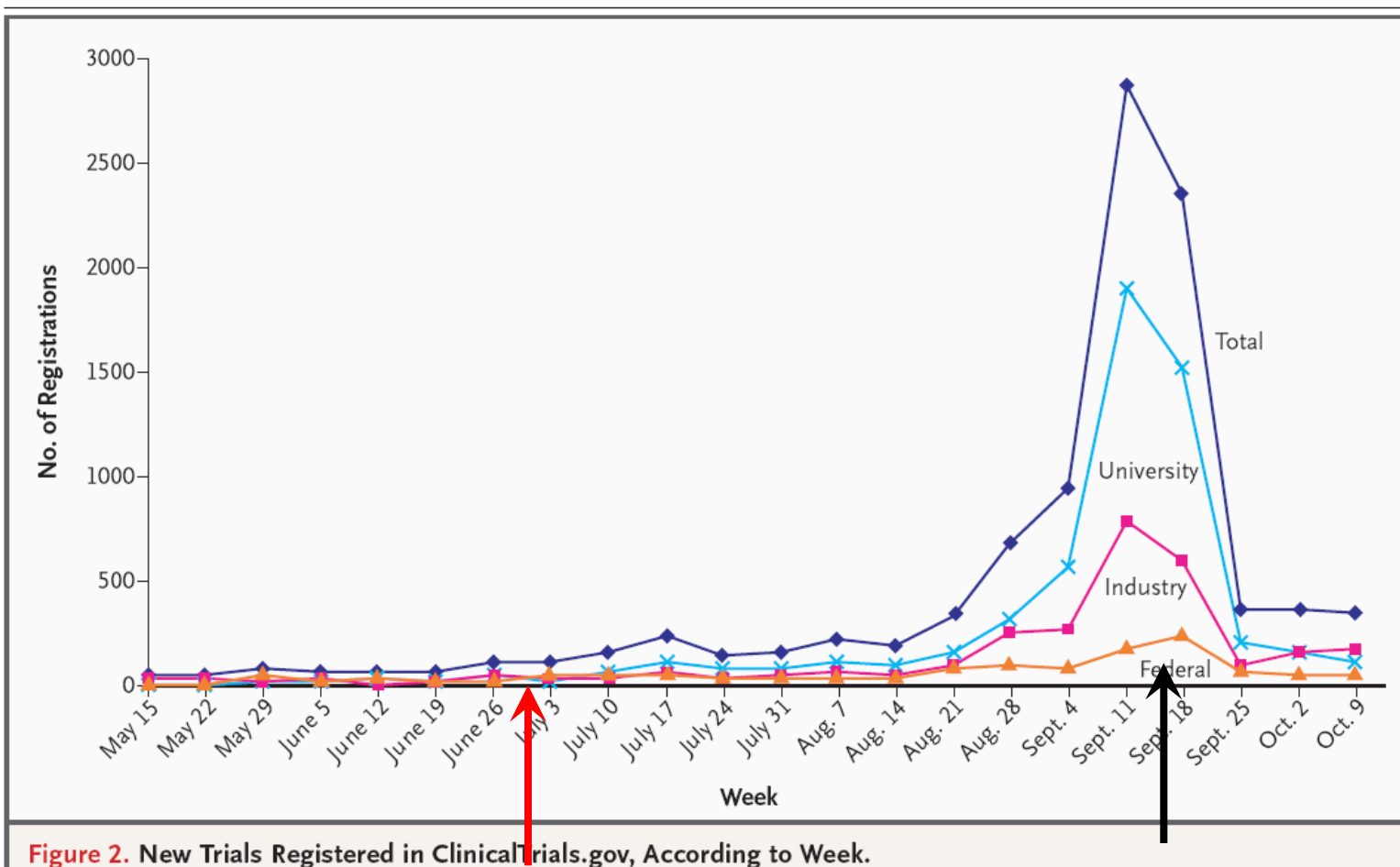
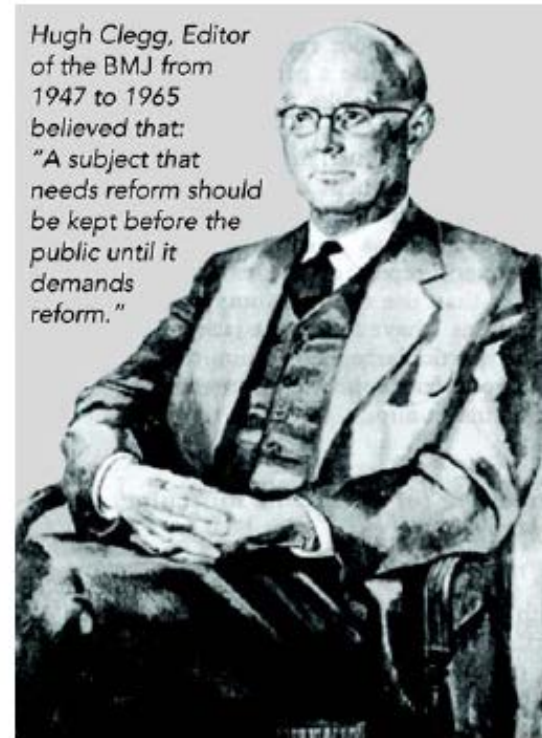


Figure 2. New Trials Registered in ClinicalTrials.gov, According to Week.

Source: Zarin et al. N Engl J Med. 2005;353:2779.

Influencing other stakeholders?

“A subject that needs reform should be kept before the public until it demands reform.”



Viewpoint

Can small journals provide leadership?

Ana Marušić, Matko Marušić



Lancet 2012; 379: 1361-63

Quality assurance in editing?

Guidelines
Standards
Editorial policies

Structure

Process

Outcome

End result of care:
Are we getting better in
responsible publishing?

Declaring contributions and
conflicts
Verifying integrity of articles
Handling allegations
Correcting literature



A. Donabed structure, process, outcome (Appl QA):4-51.