How to Avoid Waste in Medical Research
- Viewpoints of an Editor

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Editor’s Options

1. Reason to accept
   Is this?
   • New
   • True
   • Of interest
   • Relevant

2. Reason to reject
   • Has been done (over and over again)
   • Methods are rotten
   • Who cares what the results are
   • It makes no difference, whatsoever
The Road to Perdition

1. Unclear ideas → Improper conduct
2. Improper conduct → Inconclusive results
3. Inconclusive results → Unhappy funders
4. Unhappy funders → No future academic track

At the very heart of the academic drive –
 Publish or Perish
Food for thought

• More citizens (in Norway) with a PhD than there are farmers
• Too many (so-called) research questions are asked
• Medical journals are part of this - *Useful idiots*

* Lenin VI. http://en.wikipedia.org/wiki/Useful_idiot*
It may pay to publish many mediocre articles rather than a few good ones.

Too many journals – too little good research

I sent my first manuscript to an international scientific journal in 1998. In those days it was normal for manuscripts to «go wandering». This meant that when a manuscript was rejected by one journal, it was sent on to another, normally less prestigious, journal than the first you had tried your luck with. When the manuscript was rejected by the second journal, it was sent on to a third. In the meantime, you waited. The wait for a response from the editors of journals was well known by researchers. It caused a lot of frustration and wasted time, but what might look like meaningless activity for outsiders was in fact not only that. The manuscript was often evaluated by external peer reviewers, and as a result authors received sound advice on how they could improve it.

Publication may also be offered. The journal may provide feedback within, for example, four weeks (3). The finding that professional quality assurance will have been otherwise have been. It may not have revealed the paper that revealed Jon Sudbro’s (4) work.

These two phenomena, that it is similar to being in a vacuum and that quality control is under pressure, have become easier for those who want to publish in this field. It has become easier for those who are going to use the work of others and as a result, may have less influence in the future. The research output may be less available to others, which may make it more difficult to distribute the work of others.
To Harness the Waste

Three issues,

• The state of art in Norwegian Medical Academia/University hospitals
• The current situation in Tidsskr Nor Legeforen
• How to influence future authors
I. In Academia

Q: «Are the results of Systematic Reviews© accepted as a free-standing paper in a PhD thesis»?

A: «Not unless it is the ouverture to a Meta-analysis»

– Two «selfies»
II. Tidsskr Nor Legeforen

Systematic Reviews©

• Annual incidence of < 5

• «Paper of the Year»; 2002 –

• All have been narratives
"We conducted a literature search in PubMed with an emphasis on systematic review articles and meta-analyses. The search was completed in January 2014. We also included articles from our own literature archives"
“We have undertaken literature searches in Medline and EMBASE for the period May 2009–July 2014. Studies that did not include measurements of pulmonary function or refer to occupational exposure were excluded. We have also included three prospective studies on pulmonary function and occupational exposure that were not indexed with the search terms used for obstructive pulmonary disease”
How to Influence Authors

What is the difference between

• Systematic search and

• Systematic Review©

http://tidsskriftet.no/article/2110598

http://tidsskriftet.no/article/3048397/en_GB
Chief Editor Charlotte Haug:

http://tidsskriftet.no/article/2110598

«So far, review papers have a fairly short methods section that is limited to whether the literature search was «systematic» or «non-systematic». We regard these phrases as rather dissatisfactory and not at all clarifying."
Empirical Evidence?

Q: Was Mrs. Thatcher right - «There is no such thing as --- Experience»
III. How to Influence Authors

Dissemination principle (KISS):

K - Keep
I - It
S - Simple
S - Sweetheart
Two relevant papers – For a start

The Nor-way (Start digging where you stand)


• *Jamtvedt G et al.* Kunnskapsbasert forskning? Tidsskr Nor Legeforen 2014; 134: 10-1
Figur 1. systematisk oversikt
Hvor mye vekt resultatene fra de enkelte studiene utgjør av det samlede effektestimatet

Estimat fra den enkelte studie med konfidensintervall. Vist med tall og grafisk

$I^2$ er et mål på heterogenitet

Samlet effektestimat fra Studiene i denne analysen

Figur 2. Metaanalyse
Evidence Based Research

How to avoid was waste; e.g., via intensified efforts to spread the news/use of Systematic Reviews©

Whose responsibility?

• Academic institutions (Universities/Hospitals)
• Medical journals; e.g., Tidsskr Nor Legeforen
• Kunnskapssenteret

– Current status of methods dissemination?
Final rhetoric:
- Is there such a thing as --- a joint venture?