Has open data arrived at the *British Medical Journal (BMJ)*?
An observational study

Anisa Rowhani-Farid, Adrian G. Barnett

Open Access | **Research**

BMJ Open | Has open data arrived at the *British Medical Journal (BMJ)*? An observational study

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ABSTRACT

Objective: To quantify data sharing trends and data sharing policy compliance at the *British Medical Journal (BMJ)* by analysing the rate of data sharing practices, and investigate attitudes and examine barriers towards data sharing.
Design: Observational study.
Setting: The *BMJ* research archive.
Participants: 160 randomly sampled *BMJ* research articles from 2009 to 2015, excluding meta-analysis and systematic reviews.
Main outcome measures: Percentages of research articles that indicated the availability of their raw data sets in their data sharing statements, and those that easily made their data sets available on request.
Results: 3 articles contained the data in the article. 50 out of 157 (32%) remaining articles indicated the availability of their data sets. 12 used publicly available

Strengths and limitations of this study

- Our study quantified data sharing among all types of research articles published in the *British Medical Journal (BMJ)* from 2009 to 2015.
- The *BMJ* data sharing policy specifically applies to clinical trial data, but our study analysed data sharing among all studies that have original raw data.
- The sample size was 160 articles, which is relatively small.
- The *BMJ* data sharing policy suggests using the *BMJ* as a broker to negotiate data access; however, we did not use this service given the amount of time and resources it required both on our part and on the *BMJ*'s.

QUT ihbi Institute of Health and Biomedical Innovation

Openness in scientific research
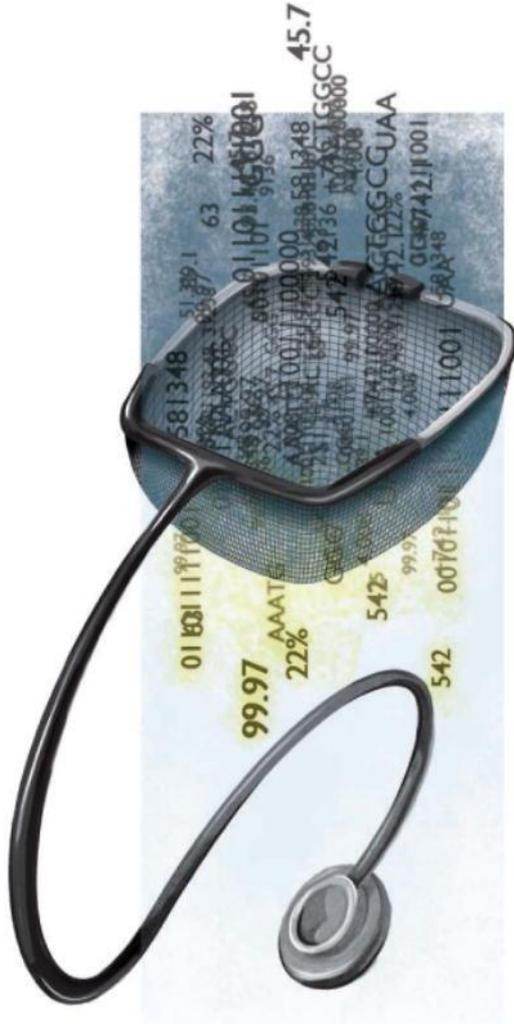
Data is the **foundation** of health and medical **research**

At the heart of open science is the principle that ***science belongs to humanity, to all of us***

Image source: SCIENCE, 2014

Advance health and medical research and promote scientific innovation

Image source: Samuel Aranda/Panos, Nature, 2015

A scientific paradigm shift

Closed science and hidden data

A period of transition

Open science and data sharing
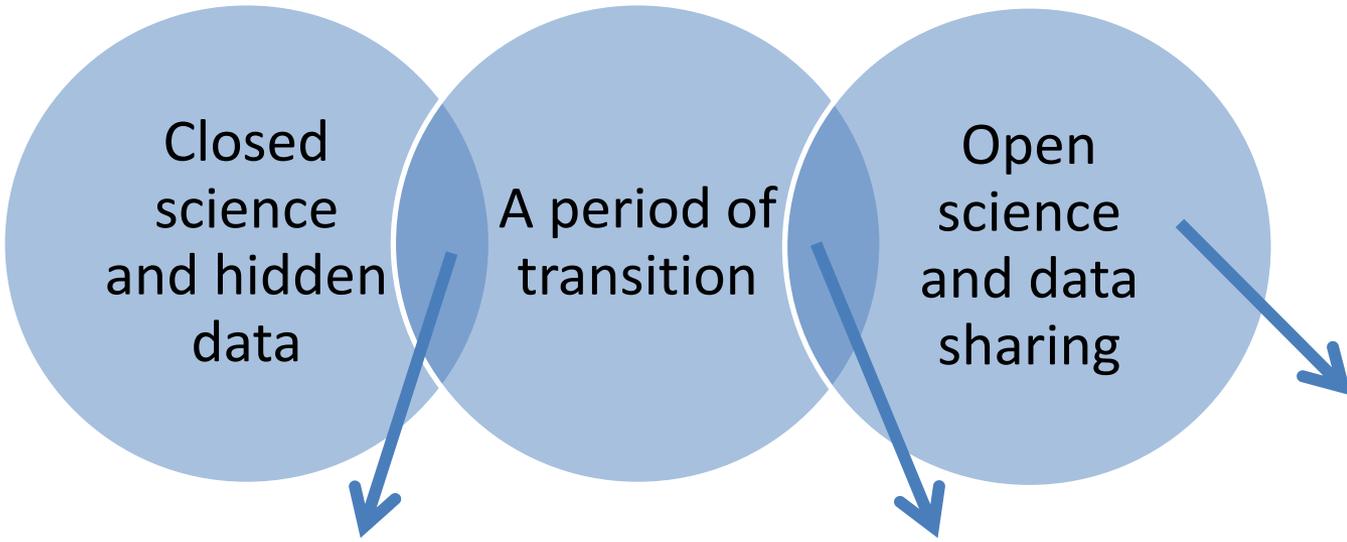
Image source: The Boston Globe, 2013

RESEARCH PARASITE

Image source: Richard Morey, 2016

OSM
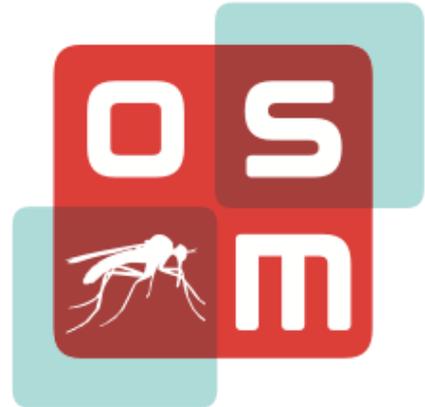
Image source: Open Source Malaria, 2016

Research incentives

Image source: Open Science Framework, 2016

Badges to Acknowledge Open Practices: A Simple, Low Cost, Effective Method for Increasing Transparency

Data depositories

Data sharing policies

Has open data arrived at the British Medical Journal (BMJ)? – an observational study

Aim of study: to quantify data sharing at the BMJ

Participants: 160 randomly sampled papers from 2009 - 2015 (no meta-analyses and systematic reviews)

Method: Analysed data sharing statements: is data available? Accessible? Verifiable? Policy compliance?

the bmj

March 2009
- Concept of data sharing statement introduced

2010
- Concept of data sharing statement crystallised as policy

2012
- Researchers informed of upcoming policy change in 2013

1 January 2013
- Trials of drugs and medical devices must commit to making anonymised patient level data available upon reasonable request

1 July 2015
- Policy ended to all submitted clinical trials not just those that test drugs and devices
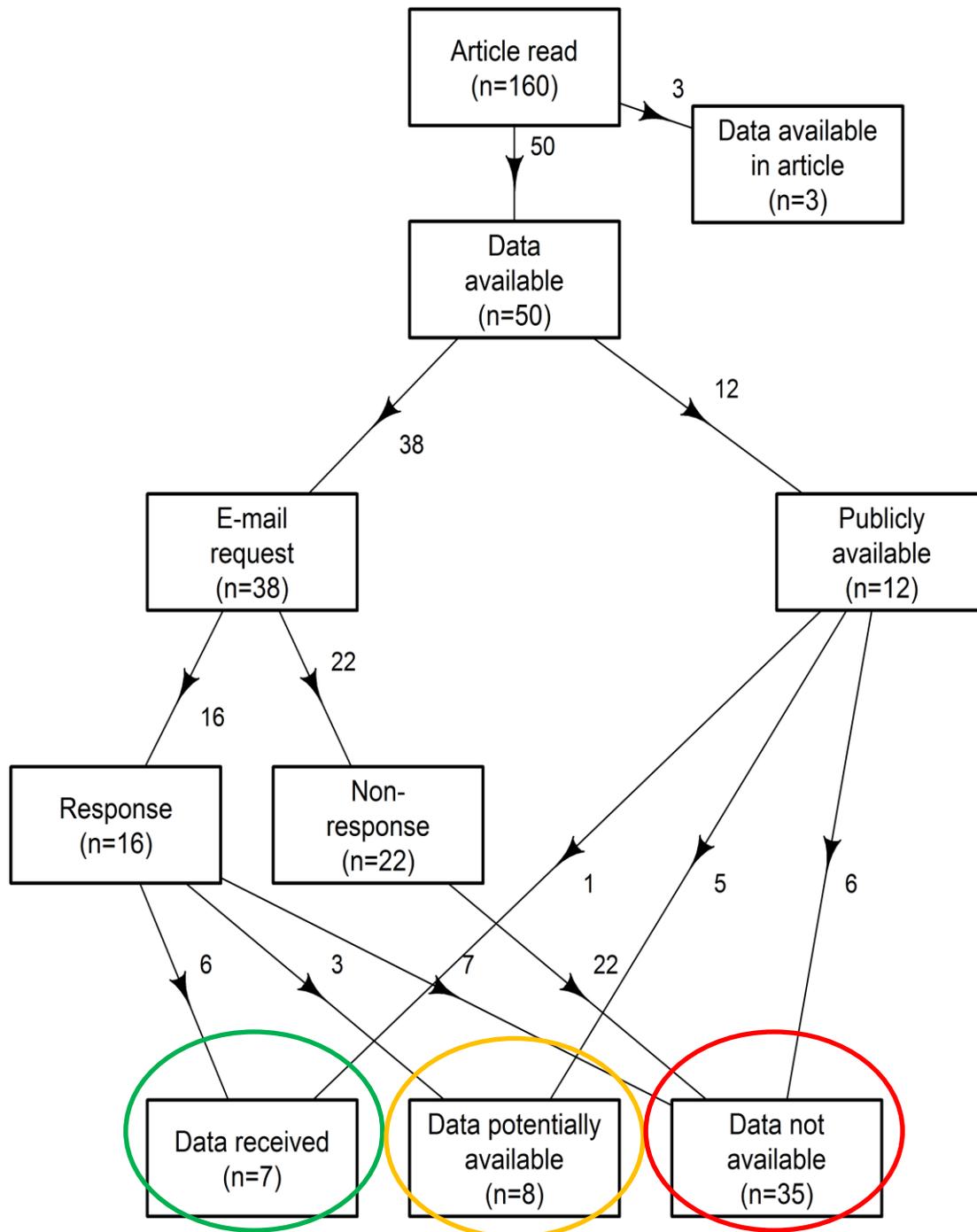
Data sharing rate for policy bound articles
= **24%**
(95% CI: 8% to 47%)

Conclusions and recommendations

Possible explanations for low sharing rates:

- Wording of policy – too vague, loop holes are found
- Email requests for data end up in spam folders maybe?
- No rewards for data sharing

Time for tighter data sharing policy and better incentives for researchers to share their data

Thank you

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Trish Groves
@trished

This paper's discussion is well worth a read along with #datasharing policy @BMJ_latest https://t.co/feofviJMqr https://t.co/5ioNZHFMbm

16 Oct 2016

Harlan Krumholz
@hmkyale

Sharing policy @bmj_latest not translating into a lot of sharing. Needs more than policies. #enforcement HT @trished https://t.co/o3JOH1sVgR https://t.co/IVmj8RLudb

15 Oct 2016