

The cohort study : part 2

In this session we will examine quality control, and look more closely at the introduction

Quality control

An entire branch of research has developed around how research is carried out and reported. It carries several names; metascience, meta-research or evidence-based research. Its main development began after a paper was published in JAMA in 1966ⁱ in which it was found that 73% of papers contained erroneous conclusions drawn from the data. One of the most prolific researchers in the field is John P. A. Ioannidis, and many of his studies have been of note. The field contains five subdomains:

1. **methods**, which deals in particular with statistical methods
2. **reporting**, concerning the publication of studies
3. **reproducibility**, a major problem in research
4. **evaluation**, and how to improve the peer-review process
5. **incentives**, or how to ensure that researchers avoid deontological slips due to the “publish or perish” mindset

Reporting guidelines have become standard practice since they were first introduced in 1993 as an attempt to ensure that a number of important elements were systematically included in any published trial. The original 32 item checklist and flow diagram has been revised at regular intervals since then, and now bears the name CONSORT. Most well-known journals require any randomised trial to use this tool. Since then, other groups were created to produce tools for other types of studies, such as TREND for non-randomised trials, PRISMA for systematic reviews and meta-analyses, and STROBE for observational studies...

While these tools were created with the authors in mind, a reader can obtain a rapid grasp of how well a paper is constructed based on the degree to which the study adheres to the checklist, and whether the flow diagram, when appropriate, is used.

Task 1

Go to the *Equator Network* site, or the *STROBE Statement* website, and download the checklist. Read through it and see how closely it appears to adhere to the list.

Task 2

Based on the information from last week (cf. document with completed table) see if you can identify the four sections of the introduction, then translate it into French.

Remember that I am available to answer your queries, should you require any explanations.

A proposed translation of the introduction will be published on my website by the end of the week.

ⁱ Schor, Stanley (1966). "Statistical Evaluation of Medical Journal Manuscripts". *JAMA: The Journal of the American Medical Association*. **195** (13): 1123. doi:[10.1001/jama.1966.03100130097026](https://doi.org/10.1001/jama.1966.03100130097026)