

Is it new, is it true and do we care—the role of prospective review registration

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At *Human Reproduction Update*, we love reviews. They can be educational, provide an in-depth overview, or contribute to clinical decision-making. But at ESHRE 2023 in Copenhagen, several people complained about the abundance of reviews, particularly systematic reviews and meta-analyses. In some areas, it is indeed hilarious with more systematic reviews than clinical trials.

So how can we separate the wheat from the chaff? The adage of the former Editor in Chief of *Human Reproduction*, Professor Hans Evers, for any incoming study was *Is it new, is it true and do we care*. We still feel the presence of Hans Evers' spirit in the ESHRE Journals' Editorial Office. Indeed, *Human Reproduction Update* checks both narrative and systematic reviews on *Is it new, is it true and do we care* such that we do not publish duplicates. *Human Reproduction Update* only publishes original reviews that are a good read, interesting, educational, and at times, even thought-provoking.

Is it new concerns originality. If similar reviews exist then we should not publish it, unless sufficient new evidence is presented. At *Human Reproduction Update*, many review proposals are rejected because they focus on a study question on which a similar review was recently published. We want a review to be sufficiently original and new; this implies that just the inclusion of a few more studies is not enough. Authors planning a systematic review may find it worthwhile to check not only the recent literature for similar published reviews but also review registries for ongoing, unpublished, reviews. There are currently five registry platforms that accept registrations of review protocols; PROSPERO (<https://www.crd.york.ac.uk/prospERO/>), Inplasy (<https://inplasy.com/>), Research Registry (<https://www.researchregistry.com/>), Open Science Framework (<https://osf.io/>), and protocols.io (<https://www.protocols.io/>).

Is it true concerns methodology and likely trustworthiness of the findings. All reviews have literature search and study selection processes. We want our authors to implement strict processes to ensure that studies that have been retracted or have a note of concern are excluded from any review. We also really want our authors to write and prospectively register their study plan in a short protocol. Why? Because, prospective registration, introduced by Straus and Moher in 2010, prevents post hoc tweaking of study selection and outcomes, and assists peer-review allowing reviewers and editors to check for any variance to the review

protocol (Straus and Moher, 2010). Additionally, registering is aimed at minimizing overlap, which was one of the main reasons PROSPERO, the first registry to be developed and mainly used to register systematic reviews, was developed (Booth et al., 2012).

For these reasons, *Human Reproduction Update* currently recommends registering a protocol for any kind of review. As registration of systematic reviews is generally considered the most important, *Human Reproduction Update* has taken the decision to change this recommendation to a requirement. **Therefore, all proposals for systematic reviews received in *Human Reproduction Update*'s Editorial Office from 1 January 2024 must be prospectively registered!**

Do we care concerns the interest of the study question for our readers. *Human Reproduction Update* aims for broad but still focused questions related to fertility and/or reproduction. Again, prospective registration of a review protocol can play a role here as it increases transparency of all aspects of the study question(s), including the availability of outcomes.

Overcrowding of the literature, specifically with systematic reviews and meta-analyses, is rightfully criticized. But the value of good systematic reviews with or without meta-analyses stands. In that light we would like to draw your attention to two reviews recently published in *Human Reproduction Update* that we feel are definitely worth reading.

The most recent one is an individual patient data meta-analysis by van Hoogenhuijze et al. (2023) on endometrial scratching. Previous reviews were conventional head-to-head comparisons. These authors pre-registered their protocol, managed to retrieve the databases from 13 randomized controlled trials, and are to be praised for the used methodology, including trustworthiness and quality checks on a question that is still considered very relevant.

Another good example is a systematic review and meta-analysis that examined whether ART is associated with DNA methylation modifications throughout life (Barberet et al., 2022). A very original question, pre-registered protocol, 51 studies subgrouped into either targeted DNA methylation or genome-wide DNA methylation, up-to-date methodology, and relevant discussion of outcomes that makes us want to know more about this subject.

These are examples of great systematic reviews and meta-analyses as they are new, likely true, and for which we feel you should care. We certainly do!

References

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