The study by Jia and colleagues analyzed randomized clinical trials (RCTs) conducted in China to identify types of duplicate publication and estimate the extent to which duplicate publication bias was associated with the language of publications.

From English- and Chinese-language clinical trial registries, Jia and colleagues identified 891 eligible RCTs that evaluated the efficacy and/or safety of drugs and were conducted between January 1, 2008, and December 31, 2014. Among 470 trials published up to August 2019, 55 (11.7%) had 75 duplicate articles. Based on the progress of recruitment and follow-up of individual RCTs, 4 duplicate types were classified, including unreferenced republication, unreferenced subgroup analysis, unreferenced interim analysis, and partial duplicate. Duplicates were also classified as cross-language duplicates or same-language duplicates.

Most duplicates were cross-language duplicates (53 of 75 [70.7%]) and unreferenced republications (33 of 75 [44.0%]). Regarding duplicate publication bias, there was no evidence that the language of the main article was an effect modifier of the association between the nature of findings (positive or negative) of the main articles and the possibility of having subsequent duplicates; however, the authors stratified the main articles into 2 subgroups based on their language and found that duplicate publication bias existed when the main article was published in Chinese. The main articles published in Chinese with positive findings were more likely to have subsequent duplicates than the main articles with negative findings.

Duplicate publication is a serious issue that not only raises copyright concerns and undermines research integrity but also distorts evidence if duplicate publications were included in systematic reviews simultaneously. RCTs may be more likely to have duplicates, as the prevalence of duplicates for RCTs in this study was higher than that in other article types in another study (12% in this study vs 5% in all article types). The cross-language duplicate in RCTs conducting in China is a particular concern. Duplicate publications continued to populate the medical literature, particularly those published in different languages which were challenging to be detected. How can readers, editors, and meta-analysts detect and prevent duplications? We propose the following 4 suggestions:

1. To avoid the duplication that might happen unintentionally, the researchers should be educated in advance on the exact definition of duplicate publications, the ethics of publishing in 2 languages, and the consequences of an ethical infraction during the submission stage. In the cover letter, the researcher must declare that the article has not been published elsewhere, regardless of the language. If a duplicate publication is unavoidable, the researchers should notify the editor of the case, provide a copy of the related article, and describe the reason why this manuscript should be republished. This approach will let the editors decide whether the manuscript can be republished or not. In the final step, the authors' agreement form with an additional emphasis on the unacceptability of duplicate publication should be signed by all co-authors.

2. For the editors, it is recommended that an editor who can understand the language of the original article investigate and decide whether the article in question merits republication. They may also detect previous articles or trial registration to prevent duplicate publications. Editors should make sure that all data in the manuscript are properly referenced and find appropriate peer-reviewers.

3. At the reviewing stage, multilingual peer reviewers are recommended to detect if an article is a duplicate publication, particularly a cross-language duplication.

4. At the postpublication stage, if a duplicate publication has been discovered, the authors must be asked to clarify how this has happened. If authors have a deliberate cross-language duplicate, the
editors should withdraw the article immediately. In this way, the researchers may be alerted to of
the consequences of an infraction. We also encourage the readers to call attention to journal
editors whenever a duplicate is discovered.

To prevent the occurrence of duplicate publications in the future, we also encourage that all
RCTs be registered and that the registered trials be listed in the international indexing systems that
can be accessed publicly. Moreover, digital plagiarism detection systems that detect duplicate
publications are warranted.

There are some potential limitations to the study by Jia et al. First, the authors hypothesized
that the main article with positive findings was more likely to have subsequent duplicates than those
with negative findings; however, they focused on the results in a subgroup analysis (the main article
of an RCT published in Chinese) rather than on the results of the primary analysis.

Second, the numbers of RCTs published in Chinese (or English) among 470 published RCTs and
55 duplicates were not provided. Previous research showed that trials with positive results would
be more likely to be published more than once and published in English. Therefore, it would be
interesting to perform further analysis examining the relative risks of having cross-language
duplicates among the main RCTs in Chinese (or English) with positive vs negative findings.

Third, it is unknown if the finding that “the main article published in Chinese were 8.03 times
more likely to have subsequent duplicates than those published in English” was reached in the
univariable or multivariable analysis. A multivariable analysis with adjustment of the other 4
covariates is preferred.

Fourth, the outcome was defined as “a main article had duplicates when at least 1 unreferenced
subgroup analysis, 1 unreferenced republication, or 1 partial duplicate was identified from the same
RCT”; it is unclear why the duplicate types of unreferenced interim analysis was not included as
the outcome.

Fifth, only RCTs that investigated the efficacy and/or safety of drugs were included, so the
findings may not be generalizable to RCTs investigating other treatments such as lifestyle
interventions.

In addition, there are overlaps between partial duplicate and unreferenced subgroup analysis.
For example, partial duplicate represents an article that contains a portion of unique participants
such as a subset of recruiting centers, and 1 of the subtypes of unreferenced subgroup analysis is an
article that includes participants from a subset of recruiting centers.

Jia et al provided information on a high prevalence of duplicate publications in RCT conducted
in China, which may help alert the research community and the public. To help prevent such practices
deliberately or accidentally, we provide suggestions. We believe that the incidence of duplicate
publications from RCTs and other studies could be minimized or even eliminated with the joint
endeavors from researchers, editors, reviewers, and readers.

ARTICLE INFORMATION
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REFERENCES

