

The many sides of Research Integrity: For Integrity in Nursing!

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We recently had the opportunity to participate in the 4th World Conference on Research Integrity in Rio de Janeiro. For us researchers, professors, authors, reviewers and scientific editors of nursing periodicals, the event was a watershed: From this point forward, we must step up our game and catch up with other areas that already discuss and teach issues related to research integrity as part of the daily education of researchers at all levels.

Throughout the four days of the event, several different aspects of research integrity were shown in the thematic plenary sessions and parallel sessions. According to the Bulletin of the Brazilian Association of Scientific Editors (ABEC), the event hosted researchers from 44 countries, working in various fields of knowledge, with emphasis on biomedicine. We identified a few nursing colleagues at the event, and those present were Brazilians from three different periodicals: the *Brazilian Journal of Nursing* (REBEn), the *USP Journal of the School of Nursing*, and the *Anna Nery School Journal of Nursing*.

It would be a mistake to think that research misconduct (as opposed to research integrity) is restricted to the most common issues of authorship, plagiarism, and data fragmentation. Misconduct can reach extremely severe levels, as in the following case: A researcher announced entirely fictitious results, with no real or correct basis. At first, the discovery led to advances in a certain drug therapy and new investments to develop the therapy. When it was finally proven that the research had never existed and that it was the result of the researcher's misconduct, a lot of direct and indirect damage had already occurred. In situations like these, the entire system (the funding organizations, the particular research center, university, research group or department, and laboratory, i.e., everything) is subject to litigation, not to mention the enormous financial losses and setbacks in other research on the same subject. This is one of the consequences of the imperative to publish and valuing quantity over quality, a perverse policy that is also applied in Brazil. We have already reported its deleterious effects on nursing research and researchers. To counter this situation, nursing training and education for research integrity must be placed front and center. We, scientific editors of nursing periodicals, have been able to clearly define the three most common forms of research misconduct:

Authorship: This is when researchers consider it a "courtesy" to mention people in administrative positions as taking part in the research production process, such as graduate or undergraduate program coordinators and heads of clinical or research laboratories. We have received manuscripts that are based on simple research, such as very local or focused descriptive studies, of the quality of undergraduate term papers, with eight authors. Sometimes, we even receive manuscripts extracted from Master's theses with the same number of authors. It is not reasonable that such simple and low-complexity studies would have so many authors. What does nursing think about the issue of authorship? Several international parameters already exist in many countries, and we should adopt them as well, thus curbing "courtesy" authorship.

Plagiarism: In our experience, this is the most common form of misconduct in publication. Our concern is that plagiarism already existed on some level and that today, due to new detection mechanisms, it only seems

that the quantity of plagiarized work is greater. Regarding the definition, we cite Rosemary Shinkai⁽¹⁾, who wrote an editorial for the *USP Journal of the School of Nursing* stating that:

Although there is also no one definition of plagiarism [...] I adopt here the broad concept used by the Brazilian Academy of Science in their document on research integrity: "plagiarism involving the appropriation of another person's ideas or work without giving due credit" and also "self-plagiarism, or republication of already published scientific results as if they were new, without referencing the previous publication"⁽²⁾.

Claiming the ideas of another person without referencing it or giving due credit for the copied material is a flagrant form of misconduct. In our opinion, plagiarism can be both accidental – when researchers get carried away writing scientific reports or manuscripts, copy ideas from books or articles, and forget to reference the sources – and intentional – when researchers copy excerpts from articles or books that do not usually circulate in the academic environment. The plagiarizers then cite the original authors cited in the articles or books from which the excerpts were copied. Whether accidental or intentional, both must be avoided, for the result is the same: the need to retract or correct the published article.

Redundancy, or self-plagiarism, occurs when the same text is published by the same authors in different places without making reference to that fact. Nowadays, with electronic publication in the annals of events, the same text can appear in different annals and then be published in scientific periodicals. Does this figure as misconduct? It depends. When texts are published in the annals of scientific events unless the events are hosted on permanent sites, the proceedings tend to disappear over time. Furthermore, even if they do not quickly disappear, their dissemination is generally restricted to participants in the events. In scientific periodicals with a good indexing base, articles are always available, and if the journals feature open access, the articles can be consulted by the entire community, thus broadening exposure and dissemination of results. Depending on the event, post-event publishing may be authorized. However, the first page of the publication, where the credentials are found, must include a notice indicating that the text is available in the annals of a clearly specified event. Furthermore, written permission must be obtained from the event responsible for publishing the annals.

Data fragmentation: The third type of misconduct is fragmenting research data. In order to increase the number of publications originating from a single study, researchers divide the results into sub-sets, frequently using the same authors and studies in the discussion. As a result, all of the articles turn out to be relatively superficial and do not contribute innovations or advances to the science of nursing. These researchers usually resort to multiple phase studies, publishing phase by phase. The originality and complex view of the subject in this type of publication are lost, as the findings are broken up into several simplified, unoriginal articles.

In 2012, The São Paulo Research Foundation (FAPESP) published the recommendations of the 2nd Brazilian Meeting on Research Integrity, Ethics in Science and Publication, so they could be broadly disseminated throughout the country's research institutions. We have copied the entire recommendation as published on their site:

1. Include, promote and publish orientations on RI/RCR (Research Integrity and Responsible Conduct of Research) and didactic material on the theme on their sites – recommending as a base document the Singapore Statement on Research Integrity(3); FAPESP's Code on Best Research Practices (4), CNPq's Directives for Research Integrity(5) and COPE's Cooperation between Research Institutions and Journals on Research Integrity Cases: Guidance from the Committee on Publication Ethics(6);
2. Include directives on scientific integrity as part of their strategic approaches to promoting excellence in research;
3. Promote awareness among students that plagiarism is an academic violation, whether in elementary school, high school, or at university. Brazilian education and research institutions should provide students with educational material showing that, in addition to being an academic violation, plagiarism in end-of-course papers, dissertations and theses is an illegal practice in Brazil;
4. Provide educational activities about RI/RCR among students and professors to stimulate institutional discussion regarding local concerns that need to be addressed;
5. Encourage students and professors to participate in national and international meetings and/or courses on RI/RCR;
6. Stimulate awareness-raising activities on the role of ethics in publications and about academic authorship in collaborative work, whether national or international;
7. Offer opportunities for students and professors to develop international linguistic skills for responsibly communicating science and its results to their peers and society;
8. Develop initiatives among undergraduate and graduate students that promote the notion of responsibility in research activities and public trust in science; and
9. Disseminate this document among students, researchers and Brazilian professors".

The 4th World Conference on Research Integrity presented advances from various countries and fields of knowledge regarding the implementation of institutional processes for research integrity and responsible conduct of research. It is up to us researchers, teaching staff, authors, reviewers and editors to set Brazilian nursing on the path towards integrity in nursing!

REFERÊNCIAS

1. Shinkai RSA. Originality and plagiarism: a question of authorship in the Academy. *Rev Esc Enferm USP* [Internet]. 2014 Jun [cited 2015 Jun 21];48(3):388-93. Available from: <http://www.scielo.br/pdf/reeusp/v48n3/0080-6234-reeusp-48-03-388.pdf>
 2. Academia Brasileira de Ciências (BR). Rigor e integridade na condução da pesquisa científica: guia de recomendações de práticas responsáveis [Internet]. Rio de Janeiro (RJ): ABC; 2013 [updated 2015 Jun 25; cited 2015 Jun 21]. Available from: <http://www.abc.org.br/IMG/pdf/doc-4311.pdf>
 3. Singaporestatement.org [Internet]. Singapore (SG): [publisher unknown]; 2010 [updated 2015 Jun 06; cited 2015 Jun 21]. Available from: http://www.singaporestatement.org/downloads/singapore%20statement_A4size.pdf
 4. Fundação de Amparo à Pesquisa do Estado de São Paulo (BR). Código de boas práticas científicas [Internet]. São Paulo (SP): FAPESP; 2012 [cited 2015 Jun 21]. Available from: http://www.fapesp.br/boaspraticas/codigo_050911.pdf
 5. Conselho Nacional de Desenvolvimento Científico e Tecnológico (BR). Diretrizes [Internet]. Brasília (DF): CNPq; 2010 [updated 2015 Jun 26; cited 2015 Jun 21]. Available from: <http://www.cnpq.br/web/guest/diretrizes>
 6. Committee on Publication Ethics (UK). Cooperation between research institutions and journals on research integrity cases: guidance from the Committee on Publication Ethics [Internet]. London; COPE; 2012 [updated 2015 Jun 06; cited 2015 Jun 21]. Available from: http://publicationethics.org/files/Research_institutions_guidelines_final.pdf
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