From Bioethics to Data Sharing for Transparency in Nursing Research

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Research is designed and accomplished very carefully and should be objective to ensure the results are valid and credible. Published articles should clearly provide a written, transparent description of how the research was conducted, the results were obtained, and the conclusions were reached [1]. Reporting of research should be truthful, free of bias, and provide enough information about how the experiments were performed to allow others to replicate the work and be useful for further analyses [1,2]; this is also associated with research integrity and transparency.

Our journal, *Journal of Korean Academy of Nursing (JKAN)*, adopted data sharing policy in December 2020 (<https://www.jkan.or.kr/index.php?body=dataSharing>) [3] which was applied from volume 50 issue 6 after extensive discussion. As editor-in-chief, I would like to inform our readers to enhance their understanding of the data sharing policy.

What is transparency in research? Is it necessary in the research of nursing science? Scientists and editors have focused on research ethics and journals required to document approval by the Institutional Review Board (IRB) for several decades. In recent years, transparency has begun to be emphasized in the scientific community and editors, recognizing the importance of this, are emphasizing transparency through policy statements such as data sharing in each journal [1,2]. Research transparency issues are not irrelevant to bioethics. In bioethics, compliance with research proposals to protect subjects in the research process is crucial, and transparency focuses on the objectivity of the

research results conducted after approval of the research plan.

Prior to explaining transparency, I would like to report the status of non-compliance with IRB approval. Bioethical issues can be divided into four categories during the previous year in the review process of JKAN. The first issue concerns preliminary research before approval. The second is conducting a study different from the approved research project subject or title. Third, the research method is different from the content of the approved research protocol. As a result, both the second and the third are different from the IRB approval content, so they must have been approved through a change review by an affiliated IRB. The fourth is the issue of obtaining consent. If the researcher is suspicious of the consent process, especially in the case of vulnerable subjects such as children, the elderly, and students at work, the results of the study are less reliable. When in doubt whether the research was conducted in compliance with the Helsinki Declaration, the author should explain the rationale for conducting the research method, and indicate that the IRB has thoroughly reviewed and approved the questionable area [1]. Therefore, it is required that researchers must follow to fulfill the purpose of IRB review and conduct research according to the approved content. If any changes are necessary during the research, approval must be obtained through reconsideration. This can be considered a prerequisite for securing transparency in nursing research. The lack of transparency is often evident not only in the lack of clarity or completeness in the writing of a report, but also in incomplete

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reporting of data, analytic tools, and materials, and hinders replication efforts [2].

Now, we will examine the trend of transparency and describe the background behind JKAN's declaration of data sharing. Most journals have strict management of research topics, methods, and research misconduct. However, the aspect about transparency is now beginning to be introduced.

What is transparency and how should authors report on their research? New guidelines are being developed to move scientific reporting toward greater openness. Our JKAN declares a policy regarding data sharing and transparency to provide free and open services to increase research transparency and align more closely with scientific values.

The Transparency and Openness Promotion (TOP) Committee created guidelines cover eight standards of transparency in the research process (**Standards:** Data Citation, Data, Materials, Code Transparency, Design, Analysis, Preregistration, and Replication) with three levels of transparency for each standard (**Levels:** Disclose, Require, or Verify). Journals can adopt standards with a level of stringency most appropriate for their own missions. Standards are (1) citation standards for citing articles and data, thus recognizing original contributions; (2) data transparency, stating the level of availability of data; (3) analytic methods, stating the statistical methods and software used; (4) research materials, stating the level of sharing; (5) reporting research design and analysis about the research process and completeness of reporting of the methodology; (6) preregistration of studies to make research more discoverable even if it is not ultimately published; (7) preregistration of analysis plans to verify whether the research is hypothesis-testing or hypothesis-generating, and (8) replication, which addresses whether or at what level the journal requires independent replications of a study before publication [2,4]. The complete guidelines are available in the TOP information commons at <http://cos.io/top> [5].

Regardless of how good a guideline is, it will be useless if readers do not accept it. We believe that it is difficult to immediately accept all eight items to ensure this transparency. Further, as researchers are not aware of this trend, editors cannot force it. The TOP Committee suggests that journals select the standards they wish to adopt and at which level [2]. Therefore, through this editorial, readers are encouraged to be aware of the

trends in scientific journals and the background JKAN has adopted the data sharing policy. Moreover, we hope that readers will be prepared to manage and open their data for the development of nursing science.

The Declaration of Taipei on Ethical Considerations Regarding Health Databases and Biobanks provides guidance for the protection of persons who allow their health data and/or specimens to be used for future research or other uses. In some aspects, this is a logical continuation of the safeguards provided by the Declaration of Helsinki; extending them into virtual environments and scenarios such as administrative or commercial uses [1,6].

Furthermore, JKAN has provided reporting guidelines like other journals to ensure that our publications, including systematic reviews, have transparency. You can read them at JKAN author guidelines and we encourage you to follow reporting guidelines such as CONSORT for randomized and quasi-randomized controlled trials, STROBE for observational, cohort, case-control, and cross-sectional studies, PRISMA for systematic reviews of controlled trials, STARD for diagnostic/prognostic studies, and COREQ for qualitative research and state some limitations in their study. This will help increase transparency. You can find the reason in not only researchers but also the editorial process and further explanation about transparency in the reporting guidelines at the editorial of the Journal of Clinical Nursing 2018 [7,8].

Scientists and editors are well aware of the value of transparency, openness, and reproducibility. Improvements in journal policies can help those values become more evident in daily practice [5]. JKAN will strive to increase transparency and become the highest qualified journal by satisfying eight standard items ranging from data to replication. For this reason, JKAN joined to TOP factor directory in December 22, 2020.

CONFLICTS OF INTEREST

The authors declared no conflict of interest.

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DATA SHARING STATEMENT

Author can share of material resources.

REFERENCES

1. Korean Association of Medical Journal Editors (KAMJE). Good publication practice guideline for medical journals. 3rd ed. Seoul: Korean Association of Medical Journal Editors (KAMJE); 2019. p. 1–4, 77–80, 132.
2. Baskin PK, Gross RA. Transparency in research and reporting [Internet]. Alphen aan den Rijn: Wolters Kluwer; c2019 [cited 2020 Dec 12]. Available from: <https://www.wolterskluwer.com/en/expert-insights/authors-transparency-in-research-reporting>.
3. Journal of Korean Academy of Nursing (JKAN). Research data sharing [Internet]. Seoul: Korean Society of Nursing Science (KSNS); c2020 [cited 2020 Dec 10]. Available from: <https://jkan.or.kr/index.php?body=dataSharing>.
4. Center for Open Science (COS). The TOP Guidelines were created by journals, funders, and societies to align scientific ideals with practices [Internet]. Charlottesville (VA): Center for Open Science (COS); c2015 [cited 2020 Dec 10]. Available from: <https://www.cos.io/initiatives/top-guidelines>.
5. Nosek BA, Alter G, Banks GC, Borsboom D, Bowman SD, Breckler SJ, et al. Scientific standards. Promoting an open research culture. *Science*. 2015;348(6242):1422–1425. <https://doi.org/10.1126/science.aab2374>
6. World Medical Association (WMA). WMA 209th Council Session, Riga 2018 [Internet]. Ferney-Voltaire: World Medical Association (WMA); c2018 [cited 2010 Dec 10]. Available from: https://www.wma.net/wp-content/uploads/2018/04/201804_CS_English.pdf.
7. UK EQUATOR Centre. EQUATOR (Enhancing the QUALity and Transparency Of health Research) network [Internet]. Oxford: UK EQUATOR Centre; c2017 [cited 2010 Dec 10]. Available from: <https://www.equator-network.org/>.
8. Smith GD, Gelling L, Haigh C, Barnason S, Allan H, Penny K, et al. Transparency in the reporting of nursing research. *Journal of Clinical Nursing*. 2018;27(3–4):475–477. <https://doi.org/10.1111/jocn.14212>