# RESEARCH ARTICLE

# Bioethical Principles Adhered in Conduction of Research as Reported in Research Studies Published in Selected Nursing Journals

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### **A**BSTRACT

Nursing research involves human participants which raises unique and complex ethical issues. Research mandates certain ethical principles to be followed in the conduction of research while human participants are involved. This systematic review was conducted with the aim to explore the bioethical principles adhered in conduction of research as reported in research studies published in selected nursing journals. A total of 109 research articles published in 30 national and international journals published in the year 2018 were reviewed for the report of the bioethical considerations adhered. The articles were reviewed using a checklist. The findings of the study showed that out of 109 articles, 103 articles were about empirical research and six articles were systematic review. Sixty-one (56%) articles were from national journals and 48 (44%) articles were from international journals. Sixty-one (56%) articles were from biannual journals and 27 (24.8%) articles were from quarterly journals. All journals selected were peer reviewed, indexed, published both as print and online, and had an International Standard Serial Number (ISSN). Forty eight (44%) articles selected were from the journals having an impact factor. Informed consent was reported in 28 (25.7%) articles and written consent was reported in 15 (13.8%) articles. Assent was reported in 3 (2.8%) articles. Institutional review board (IRB) permission was reported in 35 (32.1%) articles and ethical committee approval was reported in 12 (11%) articles. Setting permission was reported in 32 (29.4%) articles. There was a statistically significant association found between the origin (national vs international) of the journal and the report of bioethical principles at 0.05 level of significance. There was a statistically significant association found between the journal with impact factor and the report of bioethical principles at 0.05 level of significance.

Keywords: Autonomy, Beneficence, Bioethics, Informed consent, Institutional Review Board, Justice.

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#### Introduction

There are well-known international research ethical guidelines, such as the Declaration of Helsinki, Belmont Report, Nuremberg Code, etc., which provide knowledge and ideas of ethics to investigators. Some of the important concepts and the principles of bioethics are informed consent, protection and safety of the participants, and the risk or benefit of participating in a research and an ethical review. One must comply with the ethical guidelines for the benefit of the research participants and for the welfare of the society. For the publication of a scientific research, the top priority is the adherence to the guidelines.

All research studies involving human being as participants should be conducted based on four ethical principles, such as respect for human being, beneficence, maleficence, and justice. All these four basic principles should be applied wherever applicable in all good faith in varying circumstances. Respect for person includes autonomy and protection of the vulnerable people like children and persons with diminished or impaired autonomy. Beneficence means maximizing benefit for the participants and minimizing risks and maleficence means do no harm. Justice means treating people in all fairness and just.

Nursing research involves human participants which raises unique and complex ethical issues. Research mandates certain ethical principles to be followed in the conduction of research while human participants are involved. It is important to adhere to ethical principles in order to protect the dignity, rights, and welfare of research participants. Discussion of the ethical principles

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of beneficence, justice, and autonomy are central to ethical review and it should be reported in the research. High ethical standards constitute the foundation of high-quality scientific research. In general, what is practiced is what is reported. Report of what is practiced sets a benchmark for one's study against the international standards. Hence, the need arises to assess the bioethical principles adhered in conduction of research as reported in the studies published in the selected nursing journals.

# PROBLEM STATEMENT

A study to assess the bioethical principles adhered to in conducting research as reported in research studies published in selected nursing journals.

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## **Objectives**

- To assess the bioethical principles adhered in conduction of research as reported in research studies.
- To find association between selected journal-related variables and the report of ethical principles.

## Methodology

A systematic review was adopted for the study. The population for the study consisted of all research articles published in the selected nursing journals. All research articles published in the selected nursing journals from January to December 2018 were selected as samples. A total of 109 research articles from 30 journals, both national and international journals, were included for the review. A structured checklist was used as a tool to collect the data. Each article was reviewed for the report of bioethical concepts like informed consent, IRB, beneficence, setting permission, anonymity, human dignity, etc. Institutional ethical committee approval was obtained to conduct the present study. Confidentiality is maintained with regard to the journal name, title, and author.

## RESULTS AND DISCUSSION

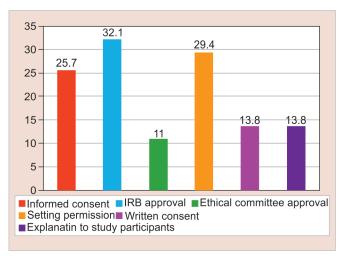
Total articles reviewed were 109, in which 103 articles were about empirical research and six articles were systematic review. Sixty one (56%) articles were from the national journals and 48 (44%) articles were from the international journals. Sixty one (56%) articles were from biannual journals and 27 (24.8%) articles were from quarterly journals. Rest all were from the monthly journals. All journals selected were peer reviewed, indexed, published both as print and online, and had an ISSN. Forty eight (44%) articles selected were from the journals having an impact factor.

### **Report of Bioethical Principles**

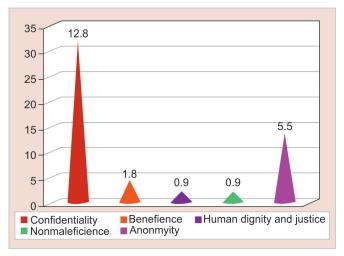
Out of 109 articles, six articles may not require the consent to be taken from the samples as they were systematic reviews. Figure 1 shows that informed consent was reported in 28 (25.7%) articles and written consent was reported in 15 (13.8%) articles. Assent was reported in three (2.8%) articles. Any research involving human being participation is completely voluntary. The informed consent involves informing the potential participants about the complete details of the research and taking signed consent form. The research participants have all the rights to know about the research.<sup>1</sup>

IRB permission was reported in 35 (32.1%) articles and ethical committee approval was reported in 12 (11%) articles (Fig. 1). The principal investigator has the responsibility to take approval from the regulatory bodies, IRB or from the ethical committee. The basic responsibility of the ethical review board or committee is to ensure the research is scientifically sound and all ethical principles are satisfactorily addressed. In this research, it was found that only 43% of the studies have mentioned about the ethical review by the appropriate agency. Getting approval from the ethical committee is mandatory as it ensures the standard of any research.<sup>2</sup>

Setting permission was reported in 32 (29.4%) articles. One of the mandates in any research is getting approval from the setting where you have access to research participants. Explanation to the participants and confidentiality was reported in 14 (12.8%) articles and beneficence was mentioned in two articles and only one article had a mention about human dignity, justice, and non-maleficence. Anonymity was mentioned in six (5.5%) articles (Fig. 2). All these are basic ethical principles which the researcher has to address in



**Fig. 1:** Bar diagram showing the percentage distribution of the articles in which the components of the ethical principles reported



**Fig. 2:** Cone diagram showing the percentage distribution of the articles in which the components of the ethical principles reported

her research. These findings are confirmed by Kalkman et al.<sup>3</sup> who in their study reported that there is a variation in the phrasing and the level of reporting of bioethical concepts and details and are reported in general terms.

From the above findings, it is understood that not all research articles have reported about the ethical principles in their report. One can understand the reason for not reporting from two perspectives. Either the researchers have failed to address these principles in their study or they have failed to report whatever principles they have addressed. Wager and Middleton in their systematic review reported that providing instructions to authors was associated with improved reporting of ethic requirements.<sup>4</sup>

# Association of Selected Journal Related-Variables with the Report of Ethical Principles

There was a statistically significant association found between the origin of journal (national vs international) and the informed consent (p < 0.05), IRB/ethical committee approval (p < 0.01), setting permission (p < 0.01), explanation to the participants (p < 0.01), confidentiality (p < 0.01), beneficence (p < 0.05), non-maleficence

(p < 0.01), human dignity (p < 0.01), justice (p < 0.01), and anonymity at 0.05 level of significance. Cross tabulation reveals that only 6% of the articles published in the national journals had the report of IRB review as against 65% of the articles published in the international journals.

There was a statistically significant association found between the impact factor and the informed consent (p < 0.05), IRB/ethical committee approval (p < 0.01), setting permission (p < 0.01), explanation to the participants (p < 0.01), confidentiality (p < 0.01), beneficence (p < 0.05), non-maleficence (p < 0.01), human dignity (p < 0.01), justice (p < 0.01) and anonymity at 0.05 level of significance. Cross tabulation reveals that 65% of the articles published in the journals with the impact factors had the report of IRB review as against 6% of the articles published in the journals without an impact factor. From the findings, it was understood that international journals having an impact factor had the report of IRB review in higher percentages when compared to the national journals without an impact factor. All the other factors remain the same irrespective of the origin as well as having an impact factor. One must understand that having one's research reviewed by the IRB ensures the quality but at the same time it is not sufficient. It is expected that one must report all the principles followed and adhered in detail to inform the readers.

# **Implications for Nursing**

- Nurse researchers must update the knowledge on ethics in research. Nurse educators must emphasize the importance of adhering to the ethical principles in conduction of research and reporting the same.
- Nurse researchers must ensure that ethical principles are adhered strictly in the conduction of research.
- Proper reporting of the ethical considerations in a research study is mandatory. The researchers must learn to report the ethical principles addressed in varying circumstances throughout the study in a satisfying manner.
- A thorough peer review is vital to ensure the adherence of ethical principles. Research critiquing will elicit the flaws and deficits in the research report; hence, a thorough critiquing by peer(s) will be helpful before sending the report for publication.

- Editors of the journal must ensure for the report of the ethical component before accepting for publication. Instructions to authors must specify the reporting of the ethical component.
- Training program should be conducted for the researchers and the journal editors on the concepts of bioethics in research and its adherence and reporting of the same.

#### LIMITATION

This study was limited to researchers published in select journals and it aimed for the assessment of the report of the bioethical concepts and verified the presence or absence of it. The necessity of reporting was not thoroughly verified with respect to the context, aims, and objectives of the research study reviewed.

#### Conclusion

In general, one can assume that "What is reported is what is done." Hence, all researchers must follow the ethical principles in conduction of the research and report the same. What is done is not reported shows the failure of the researcher to do so. The researcher must learn to report and the journal editors should emphasize on the completeness in reporting the bioethical principles adhered in conduction of research before accepting for publication to ensure quality and standard.

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