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Relationship Between Quality of Ethical Behavior and the Attributes of Nurse Researchers
Etsuko Kanaya, DNSc
Department of Nursing, Gunma Prefectual College of Health Sciences, Maebashi, Gunma, Japan
Naomi Funashima, DNSc
Science of Nursing Education, Niigata College of Nursing, jyouetu-city, Japan

Background:
Nurse researchers conduct research with the aim of improving the quality of nursing. However, when nurses contradict research ethics, their research results are not published. Therefore, understanding the relationship between the quality of ethical behavior among nurse researchers and their attributes is valuable for improving the quality of ethical behavior among nurse researchers.

Purpose:
The purpose of this study was to clarify the relationship between quality of ethical behavior and attributes of nurse researchers, and to discuss future tasks for improving the quality of ethical behavior among nurse researchers.

Methods:
The instruments used in the present study were the ‘Self-Evaluation Scale on the Ethical Behavior of Nurse Researchers’ (Scale) and a questionnaire on nurse researchers’ attributes. The Scale is composed of 30 self-evaluation items rated on a four-point Likert scale. Higher scores indicate a higher quality of ethical behavior. In total, data from 492 valid completed questionnaires in which respondents answered at least 28 (question items 1 to 28) out of the 30 question items were analyzed. The reliability and validity of the Scale have been confirmed. Internal consistency was assessed using Cronbach’s alpha, and the stability of the scores was assessed based on test-retest reliability. Construct validity was also assessed by testing hypothesized relationships using the “known-group” technique. The questionnaire on nurse researchers’ attributes was developed to investigate 14 variables extracted from a literature review regarding the relationship between nurse researchers’ attributes and the quality of ethical behavior for nurse researchers. The content validity of both the Scale and the questionnaire on the attributes of nurse researchers was confirmed in a pilot study and by a panel of experts. In total, 1,293 nurse researchers were randomly selected from a list of nurse researchers whose work as a first author had been published in a peer-reviewed journal in the previous 2 years, and sent a written request to participate in the study, accompanied by a reply card. Among these, 565 nurse researchers who provided their consent to participate by returning their reply card were sent instrument packets. The questionnaires were collected by unsigned individual posting. The data were then analyzed statistically using descriptive statistics, t-tests, and analysis of variance. The level of significance was set at P<.05. This study was approved by the Institutional Review Board at the Chiba University Graduate School of Nursing.

Results:
In total, 517 packets were returned, among which valid data from 492 were analyzed. The respondents were 440 (89.4%) female and 46 (9.4%) male nurses, excluding 6
non-responders, 195 (39.7%) nurses working in hospitals, and 253 (51.4%) members of university nursing faculties with varying ages, education levels, research areas, and research designs. The total scores for 28 question items (1 to 28) on the Scale ranged from 61-111 points, with a mean of 95.95±9.53. The distribution of the total scores was normal based on a histogram and a normal Q–Q plot. Among 14 variables on the questionnaire, the following 11 showed a significant relationship with the quality of ethical behavior of nurse researchers (P<.05): existence of research continuation; weekly research time; number of published research articles within the past 3 years; research published abroad within the past 3 years; acquisition of an external research grant; dissertation guidance; experience giving lectures on research ethics; degree of knowledge about research ethics; frequency of learning about research ethics; academic background; and institutional membership. However, years of nursing practice, age, and gender showed no significant relationship with the quality of ethical behavior of nurse researchers.

Discussion:
The findings of the present study suggest that continuing research activity as a researcher and continuing education to gain knowledge of research ethics are needed to improve the quality of ethical behaviors of nurse researchers. Factors that interrupt research activities include difficulties in study design, academic writing, and data analysis. Even after designing a study, it must pass ethical review before research can begin. Additionally, shortages of time, funds, equipment, and other resources interrupt research progress. Thus, by understanding the factors that hinder research progress, nurse researchers can more effectively avoid them. In future research, difficulties encountered by individual nurse researchers and ways to tackle them can be explored. In addition, the importance of research ethics education is increasing due to the growing interest in human rights, changes in research methods, diversification of collaborative research, and emphasis placed on authorship for career progression. Nurse researchers need to not only acquire the latest knowledge and training on research ethics at their institution, but also value and internalize this information so as to take appropriate action. If nurse researchers can internalize research ethics, ethical behavior in research can be further improved. In the future, the process of internalization of research ethics of nurse researchers should be clarified.

Conclusion:
To improve the quality of ethical behaviors of nurse researchers in Japan, continuing research activity and internalization of research ethics appear to be the most important tasks.

Title:
Relationship Between Quality of Ethical Behavior and the Attributes of Nurse Researchers

Keywords:
Ethical Behavior, Nurse Researcher and Research Ethics

References:
Abstract Summary:
This study was to clarify the relationship between quality of ethical behavior and the attributes of nurse researchers, as well as to discuss future tasks for improving the quality of ethical behavior among nurse researchers.

Content Outline:
I. Introduction
Understanding the relationship between the quality of ethical behavior among nurse researchers and their attributes is valuable for improving the quality of ethical behavior among nurse researchers.

II. Body
A. Main Point #1 Research methods
1. Supporting point #1 Instruments
   a) ‘Self-Evaluation Scale on the Ethical Behavior of Nurse Researchers’
   b) questionnaire on nurse researchers’ attributes
2. Supporting point #2 Procedure
   a) Study subject: nurse researchers whose work as a first author had been published in a peer-reviewed journal in the previous 2 years
   b) Data collecting: 1,293 nurse researchers were randomly selected from a list of nurse researchers
   c) Data analysis: The data were then analyzed statistically using descriptive statistics, t-
B. Main Point #2 Research results
1. Supporting point #1 Respondents and score
   a) 517 packets were returned, among which valid data from 492 were analyzed
   b) The Scale ranged from 61-111 points, with a mean of 95.95±9.53
2. Supporting point #2 Significant difference
   a) significant: 11 variables
   b) no significant: 3 variables

C. Main Point #3 Discussion
1. Supporting point #1 continuing research activity as a researcher
   a) By understanding the factors that hinder research progress, nurse researchers can
      more effectively avoid them. In future research, difficulties encountered by individual
      nurse researchers and ways to tackle them can be explored.
   b) In future research, difficulties encountered by individual nurse researchers and ways
      to tackle them can be explored.
2. Supporting point #2 continuing education to gain knowledge of research ethics
   a) In addition, the importance of research ethics education is increasing due to the
      growing interest in human rights, changes in research methods, diversification of
      collaborative research, and emphasis placed on authorship for career progression.
   b) In the future, the process of internalization of research ethics of nurse researchers
      should be clarified.

III. Conclusion
To improve the quality of ethical behaviors of nurse researchers in Japan, continuing
research activity and internalization of research ethics appear to be the most important
tasks.

First Primary Presenting Author
Primary Presenting Author
Etsuko Kanaya, DNSc
Gunma Prefectual College of Health Sciences
Department of Nursing
College Lecturer
Maebashi, Gunma
Japan

Author Summary: I major in science of nursing education and support the autonomy of
nurses. Currently we are engaged in research aiming at improving the quality of the
ethical behavior for nursing researchers.

Second Secondary Presenting Author
Corresponding Secondary Presenting Author
Naomi Funashima, DNSc
Niigata College of Nursing
Science of Nursing Education
Professor
sinnminamichou
jyouetu-city
Japan

**Author Summary:** 1990-Assistant Professor of Saitama Medical University College
1993-1999 Assistant Professor of Chiba University 1999-2017 Professor of Chiba University 2017- Professor of Niigata College of Nursing