Doctoral Nursing Education in Japan

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Current Status

Doctoral nursing education in Japan has changed rapidly over the past 20 years, resulting in the move of nursing education fully into the higher education system in Japan, with appropriate student numbers and quality. In 1988 the first establishment of doctoral nursing education occurred at St. Luke's College of Nursing Tokyo, after which the number of doctoral programs in Nursing increased to 61 by 2010. As administrators recognize the benefits for stable management of making their university attractive to applicants by providing graduate education, they start to create more graduate schools. Some graduate programs are independent as departments of nursing, whereas some are integrated in departments of medicine, physiotherapy, occupational therapy, or health sciences. The number of nursing universities has increased in every single prefecture. Undergraduate programs expanded from 11 universities in 1993 to 188 by 2010, and master's programs increased from eight in 1998 to 127 by 2010. The increase in nursing programs allows potential students who desire to pursue higher education in nursing to find a school in their communities.

Students have to choose to be researchers or advanced practitioners at the master’s level in Japan. Many students who choose to be practitioners attain the license of an advanced practitioner, called a Certified Nurse Specialist (CNS), who specialize in various clinical areas, including cancer nursing and psychiatric nursing. There are many graduate curricula to prepare for the completion of this postgraduate credential.

In addition, there have been an increasing number of master’s programs that help students to apply for the license of public health nurse or nurse-midwife. It is of interest that many of the students who focused on research enter the master’s program having clinical experience and become educators after obtaining the master’s degree. Furthermore, some of those who complete a master’s program pursue a doctoral degree. Regardless of master’s focus chosen, students may apply for PhD study once they have a master’s degree in nursing.

In terms of enrollees in doctoral programs, there are two groups. One group, comprised of researchers mostly in their 20s; these individuals aim to receive further research training, whereas the other group consists of college teachers in their late 40s who hope to pursue a PhD to further their career. These future educators have different needs, and current doctoral education has been challenged to meet their needs.

The dramatic increase in the number of doctoral programs has raised serious concerns in the nursing community regarding inadequate faculty numbers in the country in various specialties. Doctoral programs are comprised of a combination of coursework and dissertation research, Eto and Holzmer1 analyzed 256 dissertations of 12 schools in Japan from 1993 to 2006 and reported that doctoral students studied diverse areas of nursing with different research methods. For

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example, some students studied “adult nursing” including chronic illness, while other students studied “community health nursing,” which focuses on health concerns related to living in the community. In terms of the research methods, both qualitative and quantitative research methods were used in the dissertations: 128 qualitative (50%), 114 quantitative (44%), and 10 that combined quantitative and qualitative methods (4%). Moreover, various research designs were employed in these dissertations: development of measures (24 studies), creating nursing care programs (18 studies), randomized controlled design (six studies), and cohort studies (two studies).

Faculty and students are active in EAFONS, and they have used the regular meetings to network with faculty and students in the region. There are typically no formal arrangements with international schools for exchanges, with few exceptions. However, individual faculty takes initiatives to arrange short-term international placements for their students. Thus, the call of the author of the Japan paper to speed up globalization is most welcome.

To meet needs for higher education, current doctoral programs have begun to re-evaluate their programs and make changes for more effective education. There is a set of recent national surveys that evaluated doctoral education in nursing in Japan. First, doctoral students evaluated faculty members highly as scholars; however, about 20% to 40% of them were not satisfied with the quality of teaching and mentoring by faculty. Second, Arimoto, Gregg, Nagata, Miki, and Murashima have reported that many faculty staff rated inadequacies with the number of faculty members, and elements of the research infrastructure, such as funding, and technical and support staff needed for research. Third, graduates rated the curriculum in their doctoral program more highly than current students and faculty (“good” to “excellent” rated by 56.5% of graduates, 36.9% of faculty, and 32.8% of current students). The overall quality of teaching was rated “good” to “excellent” by 73.9% of graduates, 61.6% of current students, 31.7% of faculty, whereas the overall quality of the program was rated “good” to “excellent” by 52.1% of graduates, 45.2% of students, and 33.0% of faculty. These results suggest students and faculty have lower satisfaction with the program and the education quality compared with graduates of the program. This could mean that alumni appreciated their education many years later, after working with their own students, and also may illustrate the adage that educators believe in, which says that a great deal of learning takes place and is internalized years later.

**Challenges**

Different nursing skills and activities are required with the development of information technology, medical technology, and elucidation of genetic information. For instance, in Japan, 25% of the population is over 65 years of age, and we are facing a big challenge never before experienced in the world. Accordingly, it has become crucial to have research and clinical emphasis on preventive care, acute care, and palliative care for older adults. Older adults and their families face various situations where they need to make important decisions such as choosing medication, type of care and treatment, living arrangements, and the like. In order to assist them to make the best decision, both health professionals and the public should be given opportunities to learn about possible options in such situations. Therefore, more studies that show evidence of effective and ineffective care are necessary.

However, there is a big gap between research evidence and the translation and application of that evidence for clinical practice. Dissertations provide nursing theory, many instruments for improvement of nursing care, good practice using the RCT design, explanations about complicated phenomena using qualitative design, and verification of newly provided systems. Moreover, there are
research projects conducted collaboratively with other academic disciplines that can challenge traditional research, leading to new insights and new ideas. However, in clinical settings, routine ideas and practices are commonly used, although clinicians intellectually know there are treatments that are known to be more effective. Resistance to introducing new treatments or processes could stem from difficulties involved in changing the whole system, which is likely to require time and cost, and change in personal behavior.

The concept of evidence-based medicine was introduced in Japan a few decades ago, and more physicians are willing to use evidence-based guidelines. However, there are few guidelines in the nursing field, and nurses have limited access to information regarding existing guidelines. One reason for delay in developing nursing guidelines could be that sufficient evidence of effective treatment has not been empirically established. Therefore, further studies that test effectiveness of various nursing care interventions are needed.

Developing a new intervention and proving its effectiveness could be done during a doctoral program. In Japan, only individuals who have completed their masters thesis can enroll in doctoral programs. Thus, students have two opportunities to conduct studies in their own areas of interest, with the second building on the first. For example, a student may conduct research as part of her master’s thesis that reveals the care that patients hope to receive. Then, during her doctoral program, she might develop an intervention based on the needs and test its effectiveness. Furthermore, after completion of the doctoral programs, most students are given opportunities to work in an academic setting and continue their research as young researchers.

With regard to funding of dissertation research, most students have had to rely on external funding instead of funding obtained by their supervisors. A few students are supported by their supervisor’s research grants. The majority have to rely on obtaining external funding from government or industry sources. The latter include pharmaceutical companies, banks, publishers and the like. This has meant that they need to apply for more than one source of research funding. It is desirable for nursing faculty and scholars to be able to obtain more research grants from governmental sources as well as from companies and businesses. In order to succeed amidst high competition, it is crucial that graduate programs teach the skills of writing strong research proposals.

**Future Directions**

Japanese doctoral education faces two tasks: a system for third-party evaluation and validation of graduate programs, and improvement in the quality of dissertations. The government has recently required universities and graduate schools in all fields to have third-party auditing and evaluation once every seven years. However, although the evaluation criteria have been set by the government, they are not specialized for the nursing field. To maintain a high standard of education, the evaluation criteria should be tailored for nursing education. Thus, leaders of Japanese nursing academies have begun establishing evaluation criteria for nursing graduate education.

In addition, language and generalizability are challenges that Japanese doctoral students face when publishing their works. Many manuscripts are written in Japanese, so the dissertations are not accessible for most researchers in other countries. Eto and Holzemer¹ point out that research to improve public health is growing and, in general, is written only in Japanese. In order to solve this problem, students are encouraged to write and publish their study in English, which is the most widely used scientific language in the world. However, translation of Japanese studies may not be enough because data from the Japanese population may not be applicable for other populations. Therefore, cross-cultural comparison is necessary to increase
generalizability, and it also requires usage of a common language. Producing world-class dissertations would allow researchers to share knowledge and opinions as well as to compare similarities and differences of data collected in different cultures.

In addition to these two tasks, there are challenges for individuals who have completed a doctoral program. Most graduates take positions in an academy after earning a PhD. However, they may experience difficulties in order to update and brush up on their expertise. First, there is a shortage of postdoctoral sites despite the increased number of PhD programs. Education should be based on findings of the latest research, so continuing research is essential for a good and dynamic educator. Nevertheless, individuals with a PhD are not given sufficient opportunities to continue their research and have to spend most of their time teaching from a textbook that does not necessarily reflect new findings. Second, few universities allow faculty sabbatical leave in Japan. Professors on sabbatical can focus on their own research and some spend time abroad for further training and continuing learning. Lack of facilities and lack of a system for continuing research after doctoral program completion may hinder improvement of the quality of Japanese nursing education.

To sum up, nursing education in Japan has been rapidly changing. Needs for both basic and higher nursing education are increasing over time as new clinicians, researchers, and educators pass through the system. Despite a number of challenges and difficulties, changes to the educational system have been discussed and improvements are being made. The key to accelerating improvement and globalization of Japanese nursing lies in development of high-quality and world-class doctoral education.

References