

## Nursing Education and Research to Improve The Quality of Healthcare

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Florence Nightingale's research epitomized quality of care research. This mighty founder of modern nursing and health services focused the power of her marvelous intellect on health systems, actions, and outcomes, especially morbidity and mortality. Nightingale's main concern was the health and safety of people in hospitals and communities. She recognized how patient safety was compromised through error and poor performance.

Today, it is evident that many errors are made in health organizations. Nursing is usually a component of the health organizations where errors occur<sup>1</sup>. The recent publicity of error rates in the United States, Australia, the United Kingdom and Japan has brought the subject of medical error to the public's attention and shaken people's trust in the safety and security of its health systems. Health care quality is "the degree to which health services for individuals and populations increase the likelihood of desired health care outcomes and are consistent with professional knowledge"<sup>2</sup>. How health systems perform determines the quality of people's health care<sup>3</sup>.

In the 21<sup>st</sup> century, quality improvement research will change health care<sup>4</sup>. New clinical measures and nursing research tools are needed in Japan to stay abreast of this change. For nursing education, Buerhaus and Norman<sup>5</sup> recommend that information about quality improvement be integrated into the core curriculum, into all clinical courses and practicums, and into research courses. These authors further suggest that nurses be taught theories and methods of quality improvement and be required to evaluate how they improve the quality of their nursing care.

For changes like these in Okinawa, the faculty of Okinawa Prefectural College of Nursing should expect students to understand the system of health care delivery, demonstrate the ability to make improvements in care, recognize variation in care delivery processes, and institute change to improve performance. At OPCN, research courses should include scientific methods for quality improvement so that nurses can develop skill in quality measurement during their academic program.

Health systems throughout the world including those in Japan are getting more and more serious about quality improvement. Nurse educators and researchers, as a result, must seriously ask the following questions<sup>1,5</sup>.

- Are we providing the training and background in quality improvement that nurses need now and in the future?
- In 5 years, will our graduates be prepared for an environment in which decisions about resource allocation are based largely on information about quality?
- Will OPCN graduates be able to implement quality improvement measures in nursing practice?
- Are our students prepared with quantitative skills to conduct systems analysis and to understand controllable versus non-controllable variation in health organizations?

Japan needs professional nurses well-prepared through bachelors and masters education to systematically improve the quality of health care. Every nurse needs information about quality related problems including avoidable errors, variations in practice, and the underuse or overuse of services. Professional and organizational leadership are needed to reorient error-ridden health systems and processes. Health system reorientation requires nurses' knowledge of error analysis and error reduction methods. It requires of nurses the ability to analyze processes to discern where errors are likely occurring, where variations are problematic, and where over or under use are affecting quality. Improved quality in a health system requires nurses who are competent in the methods of quality improvement including interdisciplinary teamwork for better performance in the provision of health related services. Participating in interdisciplinary studies and understanding variation in processes and outcomes is a necessary role for all professional nurses.

The importance of nursing in the development of quality improvement cannot be over-emphasized. With leaders committed to integrating quality improvement into nursing education, practice and research, the change that is needed in Okinawa and throughout Japan will be forthcoming.

#### References

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