

Designing and Validating Standards of Nursing Practice in Radiology Department

Thesis

Submitted for partial fulfillment of the requirements of the
Doctorate Degree in Nursing Sciences
(Nursing Administration)

By

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M. Sc Nursing Administration

Faculty of Nursing
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2010

تصميم واختبار مصداقية معايير الممارسات

التمريضية بقسم الأشعة

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مقدمة من

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كلية التمريض

جامعة عين شمس

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ABSTRACT

The standards of practice describe a competent level of radiology nursing care as determined by the critical thinking module known as the nursing process. The aim of this study was to design standards of nursing practice in radiology department at El Manial University Hospital, Cairo University. This cross-sectional descriptive operational study was conducted at the radiology department of El-Manial University Hospital, affiliated to Cairo University. It involved 40 staff nurses, and a jury group of 24 nursing and medical faculty members and nursing administrators in the field of radiology. The data collection tools included an opinionnaire sheet for staff nurses, an opinionnaire form for validation, an observation checklist for staff nurses' performance, and structure inventory checklist for the settings. The study findings revealed majority agreement of nurses upon the importance of structure and process criteria of the standard, and 100.0% agreement upon applicability. Almost jury group members agreed upon the face and content validity of the proposed standards. Staff nurses' performance was generally low before dissemination of the standards, but showed statistically significant improvements after standards dissemination ($p < 0.001$). The study settings were deficient regarding availability of mission or vision, or performance appraisal. In conclusion, a standard for nursing care in radiology department was developed and face and content validated. Its applicability was shown through observation of nurses' performance, and settings structure. It is recommended to apply the developed standards in the study settings, with training staff nurses in its implementation. Quality improvement programs should be available in the radiology department to improve the quality of care provided.

Keywords

Radiology nurse, Standards , Validity

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Protocol

Submitted in partial fulfillment of the doctorate degree

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Introduction:

In the 21st century, the field of radiology became an essential part of the practice of clinical medicine and patient management. Radiology experienced extra-ordinary growth by interfering with new and important domains such as information technology & molecular biology. Radiology plays nowadays a more central role in general medical education, biomedical research and noninvasive therapeutic intervention (**Chan, 2002 & Epshteyn, 2004**).

The nurse in the department of radiology has a dynamic and varied role. The primary goal of the radiology nurse is to provide high quality nursing care to the patients within radiology department. Skills utilized in their job performance include assessment, communication, teaching, leadership and quality improvement (**DHMC, 2002**).

Nurses in the radiology department play also a vital supporting role throughout the entire department from the interventional radiology, computerized tomography (CT), ultrasound, magnetic resonance imaging (MRI) and diagnostics (**Ball, 2006**). Nurses often assist with more complex radiology procedure, such as interventional procedures requiring sedation of the patient, or procedure requiring intervene (I.V) administration of medications, contrast, and/or nuclear substances, nurses are responsible for assessing and documenting patient status, conferring with radiologist for

Radiology department is one place where nurses can reap important professional rewards. Hospital patients undergoing special interventional procedures in medical imaging departments need a positive atmosphere and a through explanation of procedure and much of that falls to radiology nurses. The radiology nurse is a key in peripheral angiographies and works in concert with technologist and the radiologist or cardiologist to ensure positive outcomes (**Gater, 2006**).

specific patient care needs and providing educational information to patient related to their radiology procedure **(Kandarpa&Aruny, 2002)**.

Many radiologists might consider procedures such as ultrasound guided biopsy suitable to be performed without nursing support, it is important to consider what is the best for patient rather than focusing simply on the requirements of the radiology department. The majority of patients has considerable anxiety about even simple procedure and from the patient's point of view, nursing support is highly desirable **(Royal Collage, 2001)**.

The nurse delivers a competent and skilled care to patient and families according to their identified needs. Nursing care is based on nursing process and augments the medical plan of treatment, the registered nurse deliver a care with a team orientation, an emphasis on good customer relations, clinical judgment and appropriate decision making abilities **(Robin, 2004)**.

The radiology nurses assume responsibility and accountability for planning and implementing patient care, they provide care to patients utilizing the nursing process and coordinate and collaborate with multidisciplinary team members. This position is accountable for providing direct patient care and maintaining expertise for all ages spanning from neonatal /newborn to young adults. The patient acuity ranges from stable outpatients to critically ill patient on full life support **(Ball, 2006)**.

Quality in health care has recently called for national effort to improve and sustain the quality of health care. Health care purchases have been demanding adopting and developing measure of health care performance **(The President's Advisory Commission, 1998)**.

The quality of care that is expected from a health care facility is made explicit by written standards that direct the way the service is to be provided and the results that should be achieved from service, standards therefore define quality. A standard is a written value statement of rules, conditions and actions in a patient, staff member, or the system that are sanctioned by an appropriate authority (**Katz &Green, 1997, and Roemer 2005**).

Nursing standards can be referred to as set criteria against which nursing care can be measured and evaluated. It is unlike outcome criterion, which measures specific patient responses to given care. A nursing standard usually reflect a broad area of nursing practice (**ANA, 2006**).

All standards of practice provide a guide to the knowledge, skills, judgment and attitudes that are needed to practice safely. They describe what each nurse is accountable and responsible for in practice. Standards represent performance criteria for nurses and can interpret nursing's scope of practice to the public and other health care professionals, standards can be used to simulate peer feedback, encourage research to validate practice and to generate research questions that lead to improvement of health care delivery. Standards aid in developing a better understanding and respect for the various and complementary roles that nurse have (**Smeltzer&Vrba, 1999**).

Nurses constitute a large number of personnel working in the radiology departments and there is no standard of nursing practice in the radiology department. So any defect in their nursing practice and their performance will affect the level of quality of care to the patient in all units of the department. For this reason the study will be conducted to designing and validating standards for nursing practice in Radiological Department.

Aim of the study

The aim of this study is to design and validate standard of Nursing practice in radiology department through;

- Investigating performance of the nurses working in the radiology department.
- Designing standards of nursing practice in radiology Department based on national and international sources.
- Assessing validity of the proposed standards based on experts' viewpoints.
- Assessing opinions of the nurses working in radiology department toward the developed standards.
- Assessing applicability of the developed standards.