Effect of Knowledge and Attitude of Nurses on Nursing Care Innovations

Janet J *

Abstract
The present study sought to evaluate the knowledge and attitude of 48 nurses from a private hospital, a nursing school and a nursing college of Kerala about nursing care innovation, and educate the nurses on the care innovations. Non-probability convenient sampling technique was employed in the study. Analysis of findings from a 3-part structured questionnaire revealed that adopting the innovations in nursing care can provide insights into identifying superior systems as against those that are less effective.

Change is an integral part in improving patient outcomes in the current health care system. In the wake of tremendous increase in research studies and the publication of research findings there are also increased numbers of different types of innovations available to health care professionals and leaders. In most organisations, it is expected that nurses utilise evidence-based findings in their practice. Today an increasing number of nurses conduct research and are involved in innovative projects that produce new knowledge. However, there is clear evidence that nurses have difficulty in integrating this new knowledge into nursing practice. Nurses are distinguished from one another by the area they work in (critical care, perioperative, oncology, nephrology, paediatrics, adult acute care, geriatrics, psychiatric, community, occupational health, etc.). Nursing roles and specialities are continually changing.

Innovation is not a new concept to the nursing profession. Motivated by the desire to improve patient care outcomes and the need to reduce costs to the health system, nurses worldwide are engaged in innovative activities on a daily basis. Many of these initiatives have resulted in significant improvements in the health of patients, populations and health systems. However, nursing’s contribution to health care innovation is seldom recognised, publicised or shared amongst nursing and other people. Nursing innovation is a fundamental modality of progress for health care systems around the world. Nurses work in all settings with all types of patients, families, communities, health care personnel and those in other sectors. They are critically positioned to provide creative and innovative solutions to the day-to-day lives of patients, organisations, communities and our profession. They also address the global health challenges such as aging populations, HIV/AIDS, tuberculosis, malaria, an increase in non-communicable diseases, poverty, inadequate resources and workforce shortages. The need for innovative solutions has never been greater as health care environments globally struggle to provide equitable, safe and effective health services within affordable costs.

Innovation means introducing something new or the act of starting something for the first time. Innovation is different from creativity, which is thinking up new things. Innovation is doing new things. Innovation has many synonyms: novelty, mutation, invention, conception, etc. It is no surprise that new opportunities will exist with change. Nursing leaders can come up in hospitals and health services and become proactive in creating organisational designs for future health systems.

Objectives
The objectives of the study were to assess the knowledge and attitude of registered nurses on nursing care innovations and educate the nurses on nursing care innovations.

Assumptions
The assumptions of the study were that nurses will not be knowing about nursing care innovation and that they will not be having favourable attitude towards innovative methods in the nursing service.

Methodology
The research approach used for this study was the quantitative research type. Non-experimental descriptive pre-test only design was used for this study. The study was conducted in selected private hospital, nursing school and nursing college in urban area of Malappuram District, North Kerala. The

* PhD candidate, College of Nursing, Sri Ramakrishna Institute of Paramedical Sciences, Coimbatore (TN).
population included serving trained nurses including those in education. The trained nurses with minimum two years of experience in selected hospital, nursing school and nursing college were samples of this study. The sample size of the study was 48. The non-probability convenient sampling technique was used in this study.

**Instrument:** A structured questionnaire was used in this study, which contained 3 parts:

*Part 1:* Data related with personal and professional information of the respondents,

*Part 2:* Consisting of 12 questions related to knowledge on innovation in nursing care, and

*Part 3:* With 10 questions related to attitude towards innovation in nursing care. The respondents took approximately 10-15 minutes to fill in the questionnaire.

**Inclusion and exclusion criteria:** The inclusion criteria was the nurses who have professional experience of minimum two years after the registration and who were willing to participate in the study. The exclusion criteria were the nurses who were unqualified and the nurses who were not available during the period of data collection.

**Data collection and analysis:** Data was collected with self-administered questionnaire. After assessment group education was given to different groups [GNM, BSc(N) and MSc(N)] separately for 30 minute duration, 2 times in a week with help of LCD and pamphlet for 2 weeks. For data analysis, descriptive statistics was used and presented in the form of graphs.

### Results and Discussion

In the study, 93.75 percent were female nurses and 6.25 percent were male nurses; 37.5 percent of nurses were in the age group 20-25 years, 33.33 percent were in the 26-30 age group, 25 percent were between 31-35 years and 4.17 percent were above the age of 35 years. 88 percent of the nurses were GNM holders and 8 percent degree nurses, 4 percent were postgraduate nurses and there were no MPhil and PhD nurses (Fig 1). Among them, 42 percent nurses attended staff development programme and 58 percent did not attend the programme; 21 percent of the registered nurses were members of professional organisations against 79 percent without such membership (Fig 2). The meaning of the word 'Innovation' was answered by 16.66 percent of nurses and 'Not Known' by 83.33 percent nurses.

The study showed that nurses’ knowledge on 'Innovation' in nursing education was only 4.16 percent. There was lack of knowledge on ‘Measure’ impact of innovation and submission criteria of innovation (Fig 3). The samples of the study showed favourable attitude on innovation but they were hesitant to be Nurse Innovator.

**The term education includes:**

**Innovation:** Process of developing new technologies, approaches or ways of working.

**Purpose of Innovation:** To improve quality of patient care, reduce health care cost, overall progress of health care system, foster nursing innovation, promote the dissemination of nursing innovations to a wider audience, recognise the contribution of nurses to health systems, provide a searchable inventory, provide an environment for knowledge sharing.

**Potential benefits of Innovation:** Improvements in service, programme and structure of nursing system, finding new information and better ways of promoting health, preventing disease and nursing care, improving patient safety and reducing / eliminating medical errors by innovation in primary health care for people in deprived areas.

**Characteristics of Innovation:** Innovation should have compatibility, complexity or rather simplicity,
trailability, observability, reinvention (Greenhalgh et al., 2005). The attitude of nurses on innovation along various parameters is shown in Fig. 4.

Innovations in nursing management include: Making best use of available skills, long term cost effectiveness, adopting evidence-based nursing practice, implementation of innovation in the specialty areas of nursing, multi-disciplinary working, informal referral system, a web-based ‘POSTCORB’ and providing reference materials for both new and seasoned nurse managers to either refresh or acquire new skills. Existing innovations in nursing are in following areas:

1. Reducing maternal morbidity from puerperal fever by maintaining environmental hygiene (Nightingale study)
2. Kangaroo mother care for pre-term baby
3. Use of electronic medical records (EMR)
4. Hospice and special rehabilitation centres for chronically ill patients
5. Advance technology for clinical teaching
6. Technology to prevent pressure ulcers
7. Advanced comfort devices for patient safety and
8. Participatory nursing care.

The strategies for improving nursing service innovations underline the need to facilitate innovation in nursing and improve policy planning in nursing and health services and develop quality and cost effective services. Other areas are, preparing future managers and leaders, improving curricula changes in nursing, and networking - nationally, regionally and internationally.

The strategies of nursing education innovation include: Online survey and formulating questions, shared with...
nurse leaders; developing an electronic communication (shared innovative practices), focus group discussion at the nursing summit, incorporating creative use of technology, using concept mapping, integrating educational theories, using gaming in classroom and clinical settings, employing integrative exercise and tests as teaching tools, mobile library, mobile books for nursing and health.

Dissemination of innovation: The measures include formal communication through organisations, informal communication (diffusion), in which ideas of innovation are adopted individually in a decentralised manner.

Recommendations
Similar study should be repeated with large samples. A comparative study can be done to assess innovative care practice of nurses. A study may also be undertaken with post doctorate nursing students as subjects. There is also a need to motivate innovative nursing practice in nursing education and nursing service.

Conclusion
Nurses have considerable experience in the care and support of people with acute and chronic illness, both in institutional and community settings. The new initiatives of the innovative care offer nurses opportunities to share their wisdom about systems that can work and those that are less effective.

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