

Innovations in PICU –Nursing Perspective –I Series

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Abstract

Pediatric Critical care nursing is a specialty within nursing that deals specifically with human responses to life-threatening problems. What is the responsibility of critical care nurse? Critical Care Nurses are responsible for making sure that critically ill patients and members of their families. Many innovations have been taking place in PICU and this articles discusses few of them in series one and in the following series which will be discussed in the next article.

Key words: *Innovations, Roberts, Holistic care, Evidence based care, individualized care.*

INTRODUCTION

Innovations are part of life in every field and more so in the health care field. Innovations are mandatory in Pediatric Intensiver care setting in order to promotre patient safety, satisfaction and provide cost effective care .Follwoing are few innovations tried in some PICUs and they work well .

Standards of Care

Standards off Professional Practice IV: Collegiality The nurse caring for acute and critically ill patients interacts with and contributes to the professional development of peers and other health care providers as colleagues. Standard of Professional Practice V: Ethics The nurse’s decisions and actions on behalf of acutely and critically ill patients are determined in an ethical manner Standard of Professional Practice VI: Collaboration The nurse caring for acute and critically ill patients collaborates with the team, consisting of patients and family, and health care providers, in providing patient care in a healing, humane, and caring environment.

Background

Generating innovation in the healthcare setting faces a number of challenges when compared with industry counterparts. More than ever, innovation occupies a critical element for healthcare organizations aspiring toward clinical, research and strategic excellence,

although it may not exist as a priority due to a number of barriers. There are several strategies in other industries from which healthcare organizations can borrow, such as using nontraditional methods of problem solving, group ideation, and cross-pollination. As a high-intensity environment facing diverse challenges and conditions, the PICU is primed for building and generating innovation, which can be facilitated by implementing many of these strategies. This article describes an innovation program created to exercise a multidisciplinary approach for generating novel solutions in our PICU. Using nontraditional methods and ideation, this program has generated innovative solutions in an otherwise traditional setting, revealing new opportunities for growth, value generation, and collaboration between healthcare and the community.

The clinical nurse specialist provides evidence-based nursing care by participating in education and direct patient care, consulting the patient and family members, and

collaborating with other nurses and health care team members to deliver high- quality care. Nurse Practitioner Nurse Practitioners provide primary health care to patients and families and can function independently. The Nurse Practitioner may obtain histories and conduct physical examinations, order laboratory and diagnostic tests and interpret their

results, diagnose disorders, treat patients, counsel and educate patients and family members, and provide continuous follow-up care after patients are discharged from the CCU.

Evidence Based Care

Researchers promote the science of nursing by investigating problems related to nursing. The goal is to develop and refine nursing knowledge and practice. Staff nurses participate in nursing research by reading current nursing literature, applying the information in practice, and collecting data. Advanced practice nurses (Clinical nurse specialist and Nurse Practitioner) can assist staff nurses by conducting the research study and by serving as a consultant to the nurses during implementation of a research study.

Holistic Care Addresses

All dimensions of a person, including: physical, emotional, social and spiritual. Caring Holistic care focuses on human integrity and stresses that the body, the mind, and the spirit are interdependent and inseparable. The critical care nurse must be able to deliver high quality care skillfully, using all appropriate technologies, while also incorporating psychosocial and other holistic approaches as appropriate to the time and condition of the patient

Individualized Care

Special consideration must be given to determine the unique interventions that will positively impact each individual patient and help their progress toward desired outcomes. An important aspect in the care delivery and recovery of critically ill patients is the personal support of family members and significant others. The value of both patient-and family-centered care should not be underestimated. It is important for families to be included in care decisions and to be encouraged to participate in the care of the patient as appropriate.

Alternative Therapy in PICU

Cultural Care Diversity includes not only ethnic sensitivity and openness to differences in lifestyles, opinions, values and beliefs. Unless cultural differences are taken into account, optimal health care cannot be provided. Cultural competence is one way to ensure that individual differences related to culture are incorporated into the plan of care. Complementary and Alternative Therapies Complementary therapies

offer patients, families and health care providers additional options to assist with healing and recovery. Some of the complementary therapies that have been used in critical care areas include spirituality and prayer, guided imagery and massage.

Technology Commonly Used by Nurses Direct Nursing Care Delivery Technology

- Barcode medication administration
- Intravenous (IV) tubing
- IV pumps
- Feeding pumps
- Nasogastric tubes
- Endotracheal tube
- Tracheostomy tubes
- Syringes
- Needles
- Urinary catheters and drainage bags
- Ostomy appliances
- Wound drainage tubes
- Chest tubes
- Suction equipment
- Oxygen and air regulators, tubing, and face masks
- Oxygen tanks and regulators
- Nebulizers
- Dressings (from gauze to specialized materials)
- Traction systems
- Code carts

Robotics

- Radio frequency identification
- Electronic inventory systems
- Computerized staffing systems
- Nurse Protective Devices
- Face masks
- Gloves
- Gowns
- Hand sanitizer dispensers
- Mechanical lifts
- Patient transfer devices
- Remote Patient Monitoring
- Telemedicine and telehealth

Patient Protective Devices

Floor mats • Beds • Elopement/wandering alarms • Fall alarms • Hip protectors • Specialized mattresses (e.g., low air loss) • Specialized lighting • Hand rails in patient rooms, hallways, and bathrooms • Specialized seating cushions • Limb compression devices

Patient Assistive Devices • Canes • Walkers • Robotics • Stand assist lifts • Trapeze bars • Patient transfer devices ECD • Bed pans • Wheelchair • Prosthetic limbs • Orthotics (braces, shoes)

Advances in Patient Monitoring

Monitoring, and Surveillance • Telemetry • Bedside monitoring • Ventilators • Video surveillance • Stethoscope • Sphygmomanometer • Thermometer • Otoscope • Ophthalmoscope • Pulse oxymetry

CONCLUSION

Pediatric nurses play a vital role in incorporating innovations in to practice so that theory can be translated in to practice. Patient safety and nursing care excellence is a well emphasized concept and

therefore to, promote nursing care excellence nurses must be empowered to bring in innovations .Small or major projects can be adapted to find evidence for practice. Innovations promote patient satisfaction as well staff satisfaction .

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