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Fragile Infant and Family-Centered Developmental Care Evidence-Based Standards: The Value of Systems Thinking

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Abstract:

Infant and Family-Centered Developmental Care (IFCDC) requires systems thinking – a re-examination of all the factors that interact to create/support the implementation of these care practices. This article will explore what systems thinking means and how it must be considered a cornerstone for implementing IFCDC.

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Background

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In healthcare organizations, systems thinking is the big-picture view of the relationship between values, mission, infrastructure, education, practice, innovation, change, evaluation, and the sustainment of care over time. (2) Further, systems thinking shows the factors that influence culture –the attitudes, relationships, and behavior - of the interprofessional staff, parents, and families. Consequently, the articulated values, mission, evidence-based education, practice, and change process guide the culture and, ultimately, the organization's or unit's operational practice. (3)

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The Infant and Family Centered Developmental Care (IFCDC) Consensus Committee has been using systems thinking to guide the implementation of IFCDC within the Intensive Care Unit. (4) Assimilating the principles in the mission, vision, values, professional performance, education, clinical practice, continuous improvement process, and sustainment over the continuum of care and time is challenging in intensive hospital settings, at best. Since the onset of the pandemic, systems and systems thinking were, by necessity, interrupted. Implementing strict infection control practices has put limitations on staff, parents, and families access to the intensive care unit (ICU) and the associated disruption of consistent system-wide care practices. Parent and family member presence was severely restricted, personal contact and voice recognition was inadequate, appropriate communication with families was intermittent, and education for continuing care was limited. (5) Relationships between staff and among staff and parents/family members were affected. The "normal" flow of activity was altered, and healthcare team members became siloed in their respective specialty roles and functions. Their interactions with each other and families were done individually and not as a team approach to care. The result was fragmented, often disjointed care approaches, where disciplinary views took precedence over a "big picture" holistic care effort. (6)

The principles of Infant and Family-Centered Developmental Care: in which Systems' thinking in complex adaptive systems is essential to implementation, including:

- Baby as a competent Interactor
- Neuroprotection of developing brain
- Individualized care
- Family involvement
- Environmental protection
- Infant mental health

The evidence-based practice sections of Infant and Family-Centered Developmental Care are accomplished with Systems thinking in complex adaptive systems.

- Reducing and managing pain & stress in newborns and families
- Positioning and touch for the newborn
- Sleep and arousal interventions for the newborn
- Skin-to-skin contact with intimate family members
- Management of feeding, eating, and nutrition delivery

Consensus Committee on Infant Family-Centered Developmental Care. Report of the First Consensus Conference on Standards, Competencies and Best Practices for Infant and Family Centered Care in the Intensive Care Unit. https://nicudesign.nd.edu/nicu-care-standards/ ; February 2020.

In many, if not most, ICUs, the workforce was evaluated and limited to "essential staff" and practice. Continuous improvement processes were focused on safety occurrences; thus, practice improvement was curtailed. Consequently, operational budgets were reduced. Medical, nursing, and interprofessional student access to clinical experiences was eliminated in exchange for a simulation experience, or if clinical rotations did occur, the hospital staff acted as a preceptor instead of the usual clinical faculty. Healthcare interprofessional students graduated with limited patient/family contact.

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Why are these changes important to IFCDC implementation from a systems perspective? Because these factors impact the unit's system and culture of how care is provided. The focal point for care decisions moved from family-centered or baby-focused to one of staff availability and infection thwarting. The worst of the pandemic is over, yet the ramifications from a systems' thinking view are not.

As the restrictions of the pandemic are released, the unit operational budgets are not as quick to rebound to pre-pandemic levels, and staff shortages across all healthcare professions are common. As new hires enter the workforce, they begin to practice with limited specialized clinical skills and likely little knowledge of IFCDC. They may have never experienced the family as an essential caregiver since entering the workforce. So, their worldview of what is "usual practice" is altered. Care is probably focused more on physical needs and not developmental support. Igniting the excitement for IFCDC practice – often viewed as "fluff" or nice but not necessary to care – is like starting over with the reluctance that comes with fear, apathy, and inertia. With the development of evidence-based standards, IFCDC is essential to care for the baby and family in intensive care, yet with the impact of the pandemic, there have been policy and practice changes that have impeded progress in their implementation. (7)

Regardless of the experience and sensitive approach to the baby's needs, healthcare staff cannot provide the connection of a parent. The baby's need for neurophysiological and psychosocial support in the nurturing care of his/her parents is still essential. However, most importantly, staff need to comprehend and demonstrate competence in the skill of connecting and supporting the baby, parents, and family members. This relationship is the sustaining factor throughout the lifespan, and the foundation is established in intensive care.

Systems thinking is essential to a leader's assessment, planning, implementation, improvement, and continual monitoring of the mission, values, practice, outcome, and sustainment of a healthcare organization, an ICU, and thus is instrumental in affecting clinical care for babies and their families. As the pandemic recedes to an endemic, the interprofessional team and parents need to use systems thinking and a trusting, collaborative relationship to re-invest in the essential practice of infant and family-centered developmental care.

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