

Core Principles of Patient and Family-centered Care (PFCC)

Family-centered care is grounded in collaboration among patients, families, physicians, nurses, and other professionals for the planning, delivery, and evaluation of health care as well as in the education of health care professionals. These collaborative relationships are guided by the following principles:

- Respecting each child and his or her family.
- Honoring racial, ethnic, cultural, and socioeconomic diversity and its effect on the family's experience and perception of care.
- Recognizing and building on the strengths of each child and family, even in difficult and challenging situations.
- Supporting and facilitating choice for the child and family about approaches to care and support.
- Ensuring flexibility in organizational policies, procedures, and provider practices so services can be tailored to the needs, beliefs, and cultural values of each child and family.
- Sharing honest and unbiased information with families on an ongoing basis and in ways they find useful and affirming.
- Providing and/or ensuring formal and informal support (e.g. family-to-family support) for the child and parent(s) and/or guardian(s) during pregnancy, childbirth, infancy, childhood, adolescence, and young adulthood.
- Collaborating with families at all levels of health care, in the care of the individual child and in professional education, policy making, and program development.
- Empowering each child and family to discover their own strengths, build confidence, and make choices and decisions about their health (American Academy of Pediatrics, 2003).

Benefits of Family-centered Care

- Nurses should not only establish rapport with the patient but also with the family. This allows for optional collaboration and thus maximizes each child's growth and well-being.
- Working together parents and health care workers can make more personal and informed decisions regarding what the best treatment is for a child.
- Supporting parents in coping with the child's illness allow them to provide better care for their child and enhances the stability of the parent-child relationship.
- Together the family, nurse and health care staff are empowered to provide the most optional care for a child. (Saleeba, 2008; American Academy of Pediatrics, 2003).

Patient and Family Outcomes

Family presence during health care procedures decreases anxiety for the child and the parents. Research indicates that when parents are prepared, they do not prolong the procedure or make the provider more anxious. Children whose mothers were involved in their post-tonsillectomy care recovered faster and were discharged earlier than were children whose mothers did not participate in their care.

Family-to-family support can have beneficial effects on the mental health status of mothers of children with chronic illness. Working with families in decision-making and information sharing in all practice settings should always take into account the older child's and young adult's capacity for independent decision-making and right to privacy and confidentiality. Health care institutions should design their facilities to promote the philosophy of family-centered care. Pediatricians should create a variety of ways for children and families to serve as advisors—as members of child or family advisory councils, committee, and task forces dealing with operational issues in hospitals, clinics, and office-based practices;

challenges when clinical care is provided to them. Henceforth, ethical principles of autonomy and informed consent can be different in pediatric applications. Treatment objectives expressed by parents or other child caretakers can be different from the child's goals. Healthcare professionals are ethically compelled to respect and integrate the child's expressed wishes, the parents's expressed outcomes, the child's maturational needs, and the family's cultured beliefs about family roles and child-rearing practices. Such considerations bring new ethical considerations and challenges to treatment (Perkin, 2015).

Informed consent constitutes one of the important considerations included in the myriad ethical dilemmas in the pediatric intensive care unit. Traditionally, the law has viewed children as incompetent to make medical decisions, and society has authorized parents or guardians to act on behalf of children. Empirical evidence has revealed that children may be more capable of participating in their medical decisions than previously thought. Accordingly, parents have the right to give informed permission and that professionals should seek the child's assent in many circumstances. Physicians in the intensive care unit should seriously consider consulting adolescent patients about the direction of their care and may wish to seek the input of younger patients in appropriate circumstances (Zawistowski and Frader, 2003).

Children are inherently more vulnerable than most adults. Health care professionals have even more responsibility for ensuring ethical action. Because children cannot weigh risks and benefits, compare alternatives, or appreciate the long-term consequences of decisions, they are incapable of making informed decisions. As a result, autonomy is less important in pediatrics than in adult medicine. Because children are immature and vulnerable, they need an adult to make decisions for them and to protect their best interests. Parents are presumed to be the appropriate decision-makers (Perkin, 2015).

Children also differ from one another. Infants differ from toddlers, who differ from preschoolers, who differ from school-aged children and adolescents. Also, there is wide variability in size, ability, psychosocial development, cognitive development, and maturity within the various groups of children. The child's ability to engage in particular aspects of care, including its ethical aspects, or to more toward particular goals of treatment can vary with the child's immediate developmental abilities, themes, challenges, and tasks (Perkin, 2015).

Nurses can enhance their decision-making ability by taking advantage of educational opportunities that focus on ethical analysis and the specific moral issues faced by critical care nurses. Ethics education helps practitioners make moral choices based upon reason rather than intuition. Hospitals can provide a variety of educational opportunities for both nurses and physicians that enhance their knowledge of ethics and their collaboration. Grand rounds, unit-based rounds, and journal clubs are excellent additions to formal educational seminars (Curley and Moloney, 2001).

Conclusion

The ethical and legal responsibilities of nurses working in critical care areas have increased since 1990s. Nurses must maintain and continually update their knowledge base and clinical competence. Failure to do so could not only cause harm to patients but could also put nurses and their employer at risk for allegations and professional negligence. As a registered nurse working within the health care industry it is important to consider all sides of the ethical debate and to always act within the law and with the best interests of the client in mind.

Bibliography

1. Bowden, V.R., and Greenberg, C.S. (2010). *Children and their families*. Philadelphia: Lippincott William and Wilkins.

- carotid and aortic chemoreceptors to the respiratory control center in the medulla.
- b. Thermal stimuli due to the sudden cooling of neonate in the extrauterine environment. This sudden change in the temperature excites sensory impulse in the skin that are transmitted to the respiratory center.
 - c. Tactile stimulation during the descent through the birth canal and after delivery by drying the skin.
- The viscosity of lung fluid and the surface tension in the alveoli are the forces that oppose the air entry into the lungs. The presence of surfactant in the alveoli reduces the surface tension forces. When the lungs expand at birth, the fluid in the lungs is evacuated into the lymphatic vessels and the blood capillaries.
 - Respiratory rate is rapid during newborn and infancy period due to the large dead air space.
 - Lung growth is rapid afterbirth because of the increased number of alveoli and respiratory bronchioles.
 - The tissues of the respiratory tract are delicate and do not produce mucus during infancy period.
 - The epithelium and the dermal layers of the mucous membranes do not provide for protection from the invasion of infectious organisms because of less humidification and warming of air.
 - Due to the proximity of the short, straight eustachian tube of the infant to the throat, trachea, bronchi, and the lungs, the infection that occurs travels quickly to the other areas.
 - The anatomic closeness of the throat, eustachian tube and the middle ear increases the susceptibility of throat infection in infants and young children to spread to the ear, potentially causing otitis media.
 - Tonsils and adenoids are relatively large during childhood and are involved in the production of immune bodies.

Upper Airway Differences

- The airway of the infant is short, narrow, and is approximately 4 mm in diameter, compared to the adult airway 20 mm diameter. Hence, the respiratory tract obstructions are common in infants and young children (Ball, 2008).
- The epiglottis is located at the level of cervical spine: C1 in newborns, C3 in older infants and C4 to C5 in the adults. Because of the large epiglottis in infants and its high placement, the pharyngeal soft palate is pressed on inspiration (Urden, Stacy and Elough, 2010).
- Infants are usually *obligate nose breathers* until between 4 and 6 months of age. As the neurologic pathways mature, the mouth breathing is well-coordinated. The infants do not spontaneously open the mouth to breathe when there is obstruction in the nasal passages due to secretions, edema, inflammation blocked nasal cannulas or poorly taped nasogastric tubes. This can produce significant airway compromise and respiratory distress. The newborn breathes through the mouth only while crying.
- Larynx is the funnel-shaped structure, with the narrowest portion at the cricoid ring. Because the cartilage is not well-developed, there is more chance for the collapse of larynx even during crying or inspiration and expiration, when the intrathoracic pressure changes. The larynx grows cylindrical, and has increased length, width and internal diameter by 8–10 yrs.
- The length of trachea increases primarily during the first five years of life. The head and neck should be positioned appropriately as the cartilage that supports the trachea is more flexible and is prone to compress the airway.
- The diameter of airway is smaller, and thus smaller artificial airways are used. Hence, more prone for airway compromise due to slight inflammation, edema or mucus plug in the airway. To get adequate oxygen the infant uses more effort and breathes faster.

Introduction to Pediatric Chain of Survival (American Heart Association, Guidelines for CPR 2010)

- Prevention of arrest
- Early high quality bystander CPR
- Rapid activation of EMS
- Effective advanced life support
- Integrated post-cardiac arrest care

Change in Sequence: C-A-B, Not A-B-C

The 2010 AHA guidelines for CPR and ECC recommend a change in the BLS sequence of steps from A-B-C (airway-breathing-circulation) to C-A-B (chest compressions-airway-breathing). By changing the sequence to C-A-B rescuers can start chest compressions sooner, and the delay in giving breaths should be minimal. In the A-B-C sequence chest compressions were often delayed while the rescuer opened the airway to give mouth to mouth breaths, retrieved a barrier device, or gathered or assembled ventilation equipment (Hazinski, 2010).

Critical Concepts Related to Pediatric Resuscitation

The Critical Characteristics of High Quality CPR Include

- Start compressions within 10 seconds of recognition of cardiac arrest
- Push hard, push fast: Compress at a rate of at least 100/min with a depth of at least 5 cm (2 inches) for children and approximately 4 cm (1½ inches) for infants
- Allow complete chest recoil after each compression
- Minimize interruptions in compressions
- Give effective breaths that make chest rise
- Avoid excessive ventilation

Basic Life Support (BLS)/CPR for Children from 1 Year to Puberty

How to Perform One Rescuer Child Basic Life Support

1. Check the child for a response and check breathing. Gently stimulate the child and

ask loudly, 'Are you all right'? Do not shake children with suspected cervical spine injuries. If there is no response and no breathing or only gasping shout for help.

2. If someone responds ask him to activate the emergency response system (EMS) and get automated external defibrillator (AED).
3. Check the child's pulse (take at least 5 seconds but no more than 10 seconds) and breathing. Feel child's carotid or femoral pulse. To check femoral pulse place 2 fingers in the inner thigh, midway between the hip bone and the pubic bone and just below the crease where the leg meets the abdomen.
4. If within 10 seconds you do not definitely feel a pulse or if despite adequate oxygenation and ventilation, the heart rate <60/min with signs of poor perfusion, perform cycles of compression and breaths (30:2), starting with compressions.
5. To give chest compressions make sure that child is lying on a firm, flat surface. Put the heel of one hand on the center of the child's chest on the lower half of breast bone. Put the heel of your other hand on top of the first hand. Straighten your arms and position your shoulders above your hands. Compress at least one-third the depth of chest, approximately 5 cm (2 inches). Allow complete chest recoil after each compression. This will allow blood flow into the heart. Minimize interruptions during chest compressions.
6. Open the airway by head tilt-chin lift method. Place one hand on the victim's forehead and push with your palm to tilt the head back. Place the fingers of the other hand under the bony part of the lower jaw near the chin. Lift the jaw to bring chin forward. Use a jaw thrust technique if you suspect head or neck injury.
7. Ventilations can be provided with mouth-to-mouth, mouth-to-nose, or with a bag and mask.
8. After 5 cycles, again activate emergency response system, if it is not activated. Once