

Child Health and Disease Nursing IV

Editor

Selmin ŐENOL



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PREFACE

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Chapter 1

NON-PHARMACOLOGICAL SUPPORTIVE CARE PRACTICES IN NEWBORNS

Günay ARSLAN¹
Behice EKİCİ²

INTRODUCTION

Newborns are exposed to excessive stimuli due to the immaturity of their organs and systems, the lack of drugs specifically produced for newborns, the side effects of medications, the long-term hospitalization of mature or premature newborns, and the invasive or non-invasive interventions performed during their stay (Dagoglu 2008; Dagoglu & Ovali 2008; Ovali 2008). These factors may lead to issues in later life, such as hearing and vision loss, attention problems, difficulties with self-control, and concentration challenges (Ovali 2008). Non-pharmacological methods are often preferred by nurses because they reduce the need for opioids, have no side effects, are easy to apply, are painless, and align with neonatal rights and universal ethical principles (such as beneficence, non-maleficence, autonomy, justice, honesty, and reliability) (Buyukgonenc & Toruner 2012; Dagoglu & Ovali 2008; Yildiz 2008). Non-pharmacological methods can be used alone or in conjunction with pharmacological methods (Buyukgonenc & Toruner 2012). When correctly applied, non-pharmacological methods mitigate the negative effects of advanced technological neonatal intensive care environments, reduce the use of analgesics, and lower the stress of newborns. However, non-pharmacological methods should not replace pharmacological methods (Buyukgonenc & Toruner 2012). Non-pharmacological methods commonly used in newborns include breastfeeding, providing pacifiers and sucrose, massage, holding the baby, kangaroo care, playing soft music, positioning, and reducing environmental stimuli (Buyukgonenc & Toruner 2012; Dagoglu & Ovali 2008; Gomella 2012; Yildiz 2008). Less commonly used methods

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methods not only support the newborn's natural healing processes but also strengthen the parent-newborn bond and help the newborn better adapt to their environment. Therefore, the application of non-pharmacological methods in newborn care is of great importance for neonatal health.

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Chapter 2

KANGAROO CARE FOR PAIN CONTROL DURING PAINFUL PROCEDURES IN PREMATURE INFANTS

**Sinem BAŞDEMİR¹
Hatice BAL YILMAZ²**

INTRODUCTION

Premature birth, which refers to births occurring before the 37th week of pregnancy. It is one of today's the most important global child health problems (An official practice brief from the Association of Women's Health, Obstetric and Neonatal, Nurses, 2021). Premature birth is classified as extremely early (< 28 weeks), very early (between 28 to 32 weeks), and medium to late (between 32-37 weeks) according to gestational age. Today, thanks to advances in medical technology, the birth and death rates of premature infants are decreasing. Premature infants may remain in the neonatal intensive care unit (NICU) for very long periods of time, depending on their gestational age and clinical condition. In this process, most procedures in the medical care of premature infants are painful and traumatizing. Premature infants do not show the same behavioral and physiological pain indicators as term infants during painful procedures (Hall & Anand, 2014). If procedural pain is not controlled in premature infants, it may lead to long-term negative consequences on the nervous, endocrine and cardiovascular systems. Long-term exposure to various painful procedures may lead to neurodevelopmental disorders in these infants. Compared to term infants, the number of invasive procedures such as venipuncture and blood sampling increases in premature infants due to their fragile blood vessels. Considering the negative effects of common invasive procedures on premature infants and the potential harms of pharmacological interventions, It is recommended to use many non-pharmacological interventions such as breastfeeding, non-nutritive sucking, positioning, swaddling, touching, massage, multiple stimulation, individualized

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newborns, neonatal nurses should support mothers to administer KC in every possible painful interventional procedure and provide pain control in premature infants.

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Chapter 3

ATTENTION ATTRACTION METHODS USED DURING INVASIVE PROCEDURES IN CHILDREN: EFFECT ON PAIN AND ANXIETY

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INTRODUCTION

Effective pain management is a fundamental human right and failure to treat pain is recognized as a violation of human rights (IASP, 2010). Pain is a multidimensional condition with sensory, physiological, cognitive, emotional and behavioral components (Andersson et al., 2022). Pain tolerance is also affected by the child's age, developmental and intellectual level, language skills, previous pain experiences and beliefs about pain (Yaz, Başdemir, & Geçtan, 2024). Anxiety is a state in which an individual experiences intense worry and fear in response to environmental stimuli and the absence of psychological adaptation (Simonetti et al., 2022). Anxiety related to medical procedures can be observed through various behavioral and physiological indicators (Aldakhil et al., 2020; Mustafa et al., 2024). Pain, anxiety, and fear can also lead to refusal or avoidance of medical procedures in children, slowed recovery, eating and sleep disorders, post-traumatic stress symptoms, and incontinence in severe cases (Eijlers et al., 2019; Aldakhil et al., 2020). It has been reported that medical procedures can lead to pre-procedure anxiety/anxiety affecting 30% to 75% of children (Tas et al., 2022). High levels of anxiety before and during medical procedures are associated with more pain in the child, slower recovery and lower success of sedation (Tas et al., 2022).

The use of non-pharmacologic approaches has an important place in reducing pain and anxiety experienced by children due to invasive interventions. The use of non-pharmacologic approaches together with pharmacologic approaches can be effective in controlling pain and reducing anxiety due to interventions applied in children (İnal & Canbulat, 2015).

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and development. Distraction techniques are one of the non-pharmacological methods used to decrease pain related to the invasive procedures in children and have a high level of evidence. Nurses should use accurate and reliable distraction approaches appropriate to the age and developmental levels of the children. It is critical for nurses to recognize and use approaches to improve the quality of nursing care.

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Chapter 4

BECOMING A MOTHER IN THE SHADOW OF TOCOPHOBIA

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INTRODUCTION

Labor represents a moment when women transition to the role of motherhood and experience physiological and psychological changes. However, the subjectivity of labor and the fact that it is a process full of uncertainties increase the impact of this moment in women's lives. Although pregnancy and childbirth is a physiological process, it is an important situation in which many variables need to be managed. Therefore, women may face tocophobia (Molgora et al., 2022; Lilliecreutz et al., 2021). Tocophobia is a concept defined as recurrent fears related to childbirth and the postpartum period, but it has broader meanings (Hofberg et al., 2000). Studies have shown that tocophobia rates vary from country to country, but it is known that 6.3-14.8% of women experience severe fear of childbirth (Nillson et al., 2018).

Not knowing what will happen during the birth process may cause this situation to cause fear in women. Women may experience an unusual anxiety about the moment of birth and experience recurrent thoughts of harm to themselves and their baby's health (Molgora et al., 2022). This may cause women to avoid spontaneous vaginal delivery and prefer elective cesarean section, avoid becoming pregnant and increase the risk of complications during labor. It is thought that the evaluation of tocophobia in women of reproductive age and pregnant women and the application of appropriate nursing approaches will minimize the problems that may occur in maternal and newborn health during labor and postpartum period (Wigert and Nilsson, 2020). The aim of this review is to examine tocophobia and its effects and to discuss nursing approaches in the light of current data.

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Chapter 5

NURSING CARE OF A CHILD WITH HODGKIN'S LYMPHOMA: A CASE REPORT

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INTRODUCTION

Hodgkin lymphoma is a malignant disease of the lymphoid system. It begins with painless enlargement of a regional lymph node, followed by spread to neighboring lymph nodes. If left untreated, it can metastasize to different parts of the body. Its incidence is 5/1 million and it is usually seen between the ages of 15-35. It is more common in boys. In its treatment; It is shaped according to the age of the patient, the stage of the disease and the characteristics of the tumor mass (size, location, volume). Radiotherapy, chemotherapy and often radiochemotherapy are applied together. Hodgkin lymphoma negatively affects the quality of life and causes increased health care expenses (Conk et al., 2013).

The most common type of lymphoma in childhood and adolescence is Hodgkin lymphoma. Babies and young children (up to the third year of age) very rarely get Hodgkin lymphoma. As age progresses, the disease begins to occur at a higher rate. These lymphomas are among the most common tumors in the age group between 15 and 20 years. During childhood and adolescence (0-17 age range), the most common age of occurrence of the disease is 15. Hodgkin lymphoma is slightly more common in boys than in girls (Claviez, 2018; Daw et al., 2020).

Since most of the diseases are encountered in white race, it is estimated that ethnological and genetic reasons play a role in the formation of the disease. It is also known that the risk of developing Hodgkin's disease is higher in children with certain hereditary (e.g. Wiskott-Aldrich syndrome, Louis-Bar syndrome) or acquired (HIV infection) immune system disorders (immune system diseases, immune system disorder). Kissing disease infection caused by the Epstein-Barr virus (EBV) may also play a role in the formation of Hodgkin's lymphoma. It is currently being investigated whether some environmental poisons (for example,

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Goal: Determining strategies that will increase social interaction for the individual and his family and ensuring harmony.

Nursing Initiatives

- A safe and healthy communication was established with the child and his family.
- The child and his family were given the opportunity to express their feelings.
- Changing roles within the family were discussed, and the family's adaptation to the changing roles was evaluated.
- The patient was encouraged to establish and maintain communication with family members.
- Situations that cause disruption of social communication were identified (Biro, 2011).

Evaluation: The patient stated that he would try to think more positively towards his family and environment.

CONCLUSION

In this case, the nursing care of the pediatric patient diagnosed with Hodgkin lymphoma was carried out in accordance with the six steps specified according to the compliance areas of the model. Interventions were implemented in four areas related to the model in line with the nursing diagnoses of pain, impairment in physical movement, anxiety, situational low self-esteem, ineffective role performance, impairment in family relationships, and impairment in social interaction. It can be said that the model is appropriate to use in children with chronic diseases. In order to increase the adaptation skills of Hodgkin lymphoma patients and their families, it is recommended that nursing care processes be structured according to the Roy Adaptation Model.

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Chapter 6

THE IMPORTANCE OF NURSING CARE IN CHILD SEXUAL ABUSE EXAMINATIONS

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Selver METE İZCİ²**

INTRODUCTION

Child abuse is defined by the World Health Organization (WHO) as ‘any physical and/or emotional maltreatment, sexual abuse, neglect or negligent behavior, sexual abuse, neglect or negligent behavior, or any other form of exploitation for commercial or other purposes, in the context of a relationship of responsibility, trust, or power, which is actually harmful or potentially harmful to the health, life, development, or dignity of the child.’ (WHO, 2022). Child abuse can be grouped under 4 main headings: physical abuse, sexual abuse, emotional (psychological) abuse, and neglect. According to WHO, child sexual abuse (CSA), which is defined as the involvement of a child in sexual activity that he/she does not fully understand, cannot give informed consent, is not developmentally ready, or violates the laws or social taboos of society, is a type of child abuse that is generally hidden and difficult to detect due to the tendency of victims not to report abuse (Hu et al., 2018; McElvaney, 2015; WHO, 1999). Although there are comprehensive studies reporting the prevalence of CSA as 8% in men and 18-20% in women, differences in definitions and the prevalence of unreported cases prevent us from reaching definite statistical results (Pereda et al., 2009; Stoltenborgh et al., 2015).

CSA is more common in the female gender and in the 12-17 age range (Barth et al., 2013; Howard N., 2000; Pereda et al., 2009; Stoltenborgh et al., 2015; Whitelock et al., 2013). However, it has been reported that history of substance abuse, psychological problems, mental retardation, children with physical disabilities, and whether or not sexual abuse, the child and/or other members of the family being victims of another judicial event, parental problems such as

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or other health personnel working in this field should professionally approach victims of sexual abuse who have experienced a highly traumatic event. Forensic physicians as well as nurses, who first encounter the patient and have a close relationship with the patient from the beginning to the end, should take an active role before, during, and after the CSA examination, which may be traumatic for the victim. Informing the victim with appropriate tone of voice and body language and reducing anxiety, collecting, storing, and transferring evidence, and taking part in the management of procedures in the process of STD and pregnancy prophylaxis contribute to the more accurate and complete management of these processes. It is one of the requirements of modern medicine that the SANE program and similar practices are disseminated internationally and that CSA cases are managed by a professional team specially trained in this field.

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Chapter 7

NURSING APPROACH TO PEDIATRIC DIABETIC KETOACIDOSIS TREATMENT AND CARE

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INTRODUCTION

Diabetic ketoacidosis (DKA) is a common condition in type 1 diabetes (T1D) that is characterized by high blood sugar, metabolic acidosis, and ketosis (Dhatariya vd., 2020). It is caused by a deficiency of insulin and can affect up to 25% of newly diagnosed T1D patients (T. Turan vd., 2019). Factors that increase the need for insulin, such as infection, stress, or missed insulin doses, can also increase the risk of DKA (Özüçelik vd., 2013; Rewers, 2012). The diagnostic criteria for DKA may differ depending on the guidelines, but all definitions include low pH levels, metabolic acidosis, high blood sugar, and positive ketones (Dhatariya vd., 2020).

In absolute or relative insulin deficiency, the activity of counter-regulatory hormones causes increased hepatic glucose production and decreased peripheral insulin sensitivity (Umpierrez & Korytkowski, 2016). While circulating glucose levels increase, glucose uptake at the cellular level decreases. Production of ketone increases. With increased production and decreased use, glucose concentration rises above 300 mg/dL and plasma ketones rise above 8-15 mmol/L (T. Turan vd., 2019). Patients are usually forced to resort to the hospital within days with symptoms accompanied by polyuria, polydipsia, and weight loss. Ketonemia causes nausea, vomiting, and abdominal pain. A decrease in fluid volume and electrolyte loss occurs both inside and outside the cell. Renal perfusion is impaired. Urinary excretion of hydrogen ions and glucose decreases. Hyperosmolarity increases. According to the degree of fluid loss; Symptoms of dehydration, mental status changes, hypothermia, and acetone odor on the breath occur. Metabolic acidosis develops as a result of the increase in hydrogen ions and the accumulation of

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at regular intervals. In diabetes education, the disease process, hyperglycemia management, and possible complications in insulin deficiency should be emphasized. The aim is to prevent acute and chronic complications related to diabetes and to continue healthy growth and development. Diabetes management can become difficult with life changes. All members of the diabetes team should be constant supporters of the child and their family. During hospital visits, every aspect should be evaluated. Obstacles in diabetes treatment and factors causing a DKA attack should be discussed with the child with T1DM and his family. Insulin injection sites should be checked (lipohypertrophy, malabsorption, etc.). Insulin pens and needle tips used should be checked, and insulin storage conditions should be questioned. The child with T1D and their family should be strengthened regarding diabetes management. Diabetes self-management education is recommended throughout life.

CONCLUSION

In children with known type 1 diabetes, prevention of DKA is feasible. To prevent diabetic ketoacidosis, blood sugar should be monitored and increased, especially on sick days. Insulin must never be stopped. The child with T1DM, their family, and the diabetes team should collaborate to identify educational needs, assess self-management, develop individual treatment goals, and provide ongoing psychosocial and clinical support (Ghimire vd., 2023).

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