

**CHILDREN'S INFECTIOUS DISEASES AND WAYS TO TREAT THEM WITH THE  
HELP OF NURSES IN HOSPITALS**

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**Abstract:** The health and well-being of children is of paramount importance, and therefore it is extremely important to address the infectious diseases they suffer from. Children are more susceptible to infectious diseases due to their developing immune systems, and if left untreated, these diseases can lead to serious complications and even death. In this article, we will discuss the common infectious diseases that children suffer from, the role of hospital nurses in treating these diseases, and the ways in which they can provide effective care to these young patients.

**Keywords:** Infection control, nosocomial infections, children's hospitals, children's infections.

**Introduction:** Pediatric nurses know all aspects of child development from infancy to adolescence. They should meet and collaborate with their age-appropriate children, providing emotional and behavioral support, comfort, and safety for themselves and their families. Since hospital stays are associated with a high risk of injury and emotional distance from the family, the role of nurses is to build the necessary therapeutic relationships, build trust and commitment, and use all communication skills to help patients and their parents perform their parenting role in the best possible way. The right approach to child care and its planning are important aspects for the patient's well-being and successful recruitment of staff. Despite the acute experience of working in pediatric institutions, at the stage of treatment and support, young patients cannot control what happens to them. Hospitalization is a difficult and stressful event in the life of a child, his parents and guardians.

Recently, nursing care for pediatric patients has gained great interest, necessity and importance to reduce suffering and enable children to develop. In hospitals, children who often feel unwell and need help are surrounded by strangers. It's a stressful and traumatic experience. In addition to unfamiliar surroundings, crying or feeling unwell in other patients, and frightening diagnostic and therapeutic procedures, all of this leads to high levels of fear and stress [1]. There are various psychosomatic reactions and defensive positions of the patient. Excessive attention and non-compliance with the treatment regimen can certainly cause serious problems in young patients adapting to the therapeutic regimen. Poor adherence to the regimen usually leads to the ineffectiveness of the treatment plan. This may contribute to delayed or incomplete recovery from discharge or a chronic illness. On the contrary, it is very important to treat a patient's illness in a hospital setting in an appropriate way to bring them to a mature and functioning state of health. Therefore, health professionals must create a supportive treatment environment that is tailored to individual needs, improving treatment adherence and improving hospital efficiency.

Pediatric departments and hospitals are particularly well suited for transmission. Most of the hospitalized patients are infants and young children. They often contain infectious organisms and

can secrete pathogens, especially respiratory and gastrointestinal viruses, even if they are asymptomatic. Young children are also susceptible to many infections, as they have not yet developed immunity. The close proximity of a large number of infected and susceptible carriers contributes to transmission. Behavioral characteristics of young children, such as urinary incontinence, poor hygiene, frequent licking of hands and objects, drooling and direct contact between children during play, contribute to the spread of infection. Basic care requires frequent direct contact from medical staff and parents. Multiple-bed wards, shared toys and playrooms, and sibling visits increase the risk of transmission [2,3]. Due to staff shortages and overcrowding, the number of transmission cases is increasing.

Infection can also result from a change in the relationship between the host and endogenous microbial flora due to the destruction of normal barriers to infection by invasive procedures, diseases, or therapies. Invasive procedures include the insertion of intravascular, urinary and peritoneal dialysis catheters, endotracheal tubes, nasogastric and gastrostomy tubes, as well as endoscopic and surgical procedures. In young children, the incidence of catheter-associated bloodstream infections (BSI), urinary tract infections (UTI), and some surgical site infections is higher than in older children and adults.

Normal flora lives on the skin and mucous membranes, as well as in the gastrointestinal tract. As a rule, they do not cause diseases, unless they are allowed access to sterile areas of the body. This flora consists mainly of bifidobacteria species, other gram-positive anaerobes, coagulase-negative staphylococci (CONS) and alpha-hemolytic streptococci with a smaller number of *Escherichia coli* and *Bacteroides* species. Normal flora prevents pathogens from multiplying by blocking receptors on host cells and competing for nutrients. Abnormal flora accumulates rapidly in the hospital, especially in intensive care units (ICU). Antibiotics play an important role in destroying normal flora, disrupting the balance of anaerobes, *Escherichia coli*, and cocci in the gastrointestinal tract, and promoting the proliferation of *Escherichia coli*, resistant microorganisms, and yeast. Antimicrobial resistance usually occurs in intensive care units and oncology, where the high risk of serious infection and difficulties in making a definitive microbiological diagnosis led to widespread empirical use of broad-spectrum antibiotics. This situation is particularly important in neonatal intensive care units (NICUs), where 75% of infants can receive antibiotics.

Methicillin-resistant staphylococcus aureus (MRSA) is an important cause of nosocomial infection in some pediatric settings. MRSA colonizes the nasal cavities and can be transmitted to patients by contact with their hands. Community-acquired MRSA is increasingly detected in children. Recently, strains of *Staphylococcus aureus* with moderate sensitivity to vancomycin have been described, which pose a problem for treatment. Vancomycin-resistant enterococcus colonizes the gastrointestinal tract, is excreted in the feces, and survives on contaminated objects and surfaces in the patient's environment. Colonization is much more common than infection, but serious infections still occur, especially in immunocompromised patients [6]. *Escherichia coli* and *Klebsiella* strains have recently developed extended-spectrum beta-lactamases that confer resistance to most beta-lactam antibiotics. Outbreaks of the disease have been reported in children's hospitals. Other gram-negative bacilli (*Pseudomonas*, *Enterobacter*, *Serratia*, and *Citrobacter*) that induce beta-lactamases may develop resistance during treatment, especially to third-generation cephalosporins. *Stenotrophomonas maltophilia*, *Burkholderia cepacia*, and *Acinetobacter* strains that are resistant to many antibiotics are becoming increasingly common.

Controlling the emergence of antimicrobial-resistant microorganisms (OPMs) involves prudent use of antibiotics, limiting the use of antibiotic regimens that promote resistance, optimizing the choice and duration of empirical antibacterial therapy, and monitoring resistance.

Infectious diseases are a serious problem for children, and some of the most common ones include respiratory tract infections, gastrointestinal infections, and skin infections. Respiratory tract infections such as bronchiolitis and pneumonia are highly contagious and can spread quickly among children. Gastrointestinal infections, such as diarrhea and vomiting, can lead to dehydration and electrolyte imbalance if left untreated. Skin infections such as impetigo and cellulite can cause discomfort and pain in children.

Hospital nurses play a vital role in treating children with infectious diseases. They provide basic care and are responsible for assessing the child's condition, prescribing medications, and providing emotional support to the child and their family. Nurses are trained to detect early signs and symptoms of infectious diseases and take prompt measures to prevent the spread of infection. They also have skills in wound care, pain management, and prescribing medications to relieve symptoms.

One of the most important roles that nurses play in treating children with infectious diseases is to educate the child and their family. Nurses teach the family about the importance of good hygiene practices, such as hand washing and proper disposal of contaminated items, to prevent the spread of infection. They also provide guidance on how to manage a child's symptoms, such as prescribing medications, giving fluids, and controlling their temperature. In addition, nurses provide emotional support to the child and his family, which is important to reduce anxiety and promote a speedy recovery.

Nurses in hospitals also play a crucial role in preventing the spread of infection. They strictly follow infection control rules, such as wearing personal protective equipment, using sterile equipment, and ensuring that the environment is clean and hygienic. They also monitor the child's vital signs and report any changes to the medical team, which allows them to quickly intervene and start treatment.

In addition to providing direct medical care, hospital nurses also play a vital role in developing and implementing infection control policies and procedures. They work closely with other health professionals to develop recommendations for the prevention and treatment of infectious diseases and ensure that all employees follow these recommendations. They also participate in quality improvement initiatives to identify areas for improvement and develop strategies to reduce the incidence of infectious diseases.

In addition, hospital nurses are involved in research and development of new treatments for infectious diseases. They collaborate with researchers and other healthcare professionals to identify new and innovative ways to prevent and treat infectious diseases. They also participate in clinical trials and studies to evaluate the effectiveness of new treatments and interventions.

Childhood infectious diseases are a major concern, and hospital nurses play a vital role in treating these diseases. They provide direct care, training, and emotional support to children and their families, and work to prevent the spread of infection. They also develop and implement infection control policies and procedures, participate in research and development, and collaborate with other health professionals to provide high-quality care for children. Therefore, it is important to recognize the critical role that nurses play in the management of childhood infectious diseases and provide them with the necessary resources and support to continue providing quality care.

In addition, it is important to recognize the importance of prevention and early intervention in the treatment of infectious diseases in children. Parents and caregivers can play a vital role in preventing the spread of infection by following good hygiene practices, such as hand washing and proper disposal of contaminated items. They can also monitor their child's symptoms and seek immediate medical attention if they suspect that their child has an infectious disease.

In hospitals, nurses can prevent the spread of infection by following strict infection control rules, such as wearing personal protective equipment and using sterile equipment. They can also inform parents and caregivers about the importance of hygiene and give them recommendations on how to treat their child's symptoms.

In terms of treatment, nurses can provide effective care to children with infectious diseases by prescribing medications, caring for wounds, and relieving pain. They can also provide emotional support to the child and their family, which is important to reduce anxiety and promote a speedy recovery.

Finally, it is important to recognize the importance of collaboration and communication between health professionals in the treatment of childhood infectious diseases. Nurses, doctors and other health professionals should work together to provide high-quality medical care to children and prevent the spread of infection. They must interact effectively with each other, as well as with parents and carers, to ensure that the child receives the best possible care.

### **Conclusion.**

In conclusion, children's infectious diseases are a major concern, and hospital nurses play a vital role in treating these diseases. They provide direct care, training, and emotional support to children and their families, and work to prevent the spread of infection. They also develop and implement infection control policies and procedures, participate in research and development, and collaborate with other health professionals to provide high-quality care for children. Therefore, it is important to recognize the critical role that nurses play in the management of childhood infectious diseases and provide them with the necessary resources and support to continue providing quality care.

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