

Interventions to Support Children with Autism in the Hospital

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Autism Spectrum Disorder (ASD) is a complex neurodevelopmental condition defined by differences in communication, sensory handling, and social interaction. According to the Centers for Disease Control and Prevention (CDC, 2023), around 1 in 36 children in the United States are diagnosed with ASD, and it continues to rise each year. Due to this continuous rise, it causes a decrease in understanding the specific needs of this special population within healthcare environments. Hospital settings can be very upsetting for children with ASD due to the unfamiliar stimuli, communication barriers, and interruption of their routines. These challenges may lead to sensory overload or a delay in medical procedures if appropriate interventions are not fulfilled. Effective nursing interventions for children with ASD in hospital settings are critical to minimizing behavioral distress, sensory overload, and improving patient outcomes. By utilizing evidence-based practice strategies, nurses can enhance the safety of care for this special population.

Many children with ASD experience healthcare differently from their peers. Unexpected physical contact, loud noises, crowded waiting areas, and bright lights can trigger sensory overstimulation or behavioral breakdowns. These responses are often misinterpreted by staff or even others around them who are unfamiliar with autism. This can then lead to distress for both the child and their family. Rios-Vega et al. (2024) stated that “healthcare environments designed without sensory consideration can significantly limit participation and increase patient anxiety” (Rios-Vega et al., 2024). In nursing, this topic is vital because nurses are responsible for creating personalized and compassionate care plans for patients. Nurses are the key providers who oversee adequate communication, ease comfort, and coordinate care between the patient, their families, and multidisciplinary teams. Evidence-based practice is therefore essential to ensure

that interventions are not only compassionate but effective in improving clinical outcomes, safety, and satisfaction.

Communication difficulties are the most notable barriers in caring for children with ASD. Many children may be nonverbal or have limited open-mindedness to language, which can make medical procedures and interactions overwhelming or even scary for them. Research by Davico (2023) stated that “structured communication strategies, such as visual supports, social stories, and explaining procedures or tests in ways they can understand reduce anxiety and increase cooperation during medical care” (Davico, 2023). Visual aids such as picture boards and simple drawings and explanations assist nurses in preparing children for what to expect. Nurses can also apply “social stories” (Davico, 2023) that describe each step of their visit, which therefore can reduce the unpredictability they may have. The use of calm, concrete language and avoiding abstract expressions helps children understand instructions more easily. Rios-Vega stated that “nurses who use structured communication tools not only improve patient cooperation but also experience less procedural delay.” (Rios-Vega, 2024). In nursing practice, communication interventions should be individualized and consistently reinforced throughout the hospital stay to maintain trust and predictability within an ASD patient.

Hospital environments often present multiple sensory triggers. Bright lights, loud alarms of the medical equipment can further exacerbate distress. ASD patients need sensory friendly modifications, such as dimmed lighting, a quiet room, sensory items to play with to help distract from being in the hospital setting, and possibly their comfort item from home. Antosh stated in his article that “adaptive sensory environments for patients with ASD have found a marked reduction in agitation, decreased need for sedation, and smoother transitions during care” (Antosh, 2024). Similarly, Hamdan stated that “sensory modifications should be embedded into

hospital design and procedure protocols” (Hamdan, 2024). To ensure all patients with ASD have adequate care at all times, healthcare providers could put together a cart full of sensory and fidget toys, lap pads, earplugs, or noise canceling headphones. Roy applied a sensory “toolkit” in a pediatric emergency department and observed each ASD patient for any improved cooperation during triage and any reduced waiting room anxiety. These findings demonstrate that simple interventions such as have incredible effects on the comfort and behavior of ASD patients.

Family involvement is a foundation of pediatric nursing. Parents and caregivers typically know of the child’s triggers, communication cues, and calming approach. Involving their parents in the planning and care routines promotes trust and stability. DeGuzman (2024) highlighted that collaborating with the family during hospital visits prevents escalation of distress and can better predict outcomes. Nurses should encourage caregivers to remain present during procedures or checkups if reasonable to ensure their child is at ease, stress-free and act as a distraction if any triggers occur. Any patient, regardless of whether they have ASD or not, can become very overwhelmed and scared if their parent leaves. Involving families also supports emotional strength, as parents will feel validated in their child’s care rather than being observers. Rios-Vega et al. (2024) stated that “training hospital staff to recognize sensory triggers and modify their approach enhances both patient and provider experiences. Continuous education programs that simulate real-life scenarios can prepare nurses to anticipate potential challenges before they occur” (Rios-Vega et al., 2024). As a result of this, nursing practice has been efficient and aware of caring for ASD patients.

Applying evidence-based interventions for children with ASD transforms nursing care by shifting focus from standard routines to individualized, specific, and sensory-focused care. The impact of this type of care extends far more than just patient comfort. Studies have shown that

sensory and communication interventions reduce hospital-related trauma, shorten the length of stay, and improve procedural success rates (Roy, 2024). These practices reinforce nursing's commitment to overall care and patient advocacy. Nurses who apply autism specific interventions demonstrate cultural competence and acceptance, which are key components in healthcare. In addition, these strategies enhance caregiver trust, reduce staff fatigue and burnout, and improve interdisciplinary collaboration (Antosh, 2024). As hospitals continue to adapt to ASD diagnoses, nurses continue to remain essential in advocating for structural and policy changes that assist in sensory-friendly environments.

Those with ASD still live a normal life, go to school, and some even play sports. Participation in structured physical activities has been shown to benefit both the physical and social development of children with ASD. Xing et al. (2025) conducted a 12-week group sports intervention involving children with ASD to see if any changes occurred in their physical activity levels and social interactions. It was stated that the results “demonstrated a significant reduction in sedentary behavior and a notable increase in moderate-to-vigorous physical activity, suggesting that organized group sports can effectively enhance engagement in physical exercise for this population” (Xing et al., 2025). These sessions were held four times per week for one hour and provided a structured environment along with participation, learning, and following a routine that were preferred by children with ASD (Xing et al., 2025). These findings draw attention to the importance of integrating structured sports programs into daily routines to improve both health and overall well-being of those with ASD.

It also suggests that inpatient and outpatient pediatric units should integrate similar performance interventions as part of the child's complete care plans (Xing et al., 2025). Nurses can support this idea and establish these activities during a child's stay, as well as coordinate

with rehabilitation or physical therapy. In doing this, all healthcare professionals involved in the child's care can monitor their patients and engagement and evaluate their outcomes. When evaluating and caring for them, one can see the activities they participate in the most and their physical activity levels. This is also a great way for children with ASD to release the stressors or triggers that may have been caused. In addition, by understanding the effects observed in this research, nurses and health care providers can further develop patient individualized protocols that include their level of activity bursts and recommend to their caregivers to continue this type of routine when they are going home as well. In doing this, it supports being a part of long-term outcomes for children with ASD (Xing et al., 2025).

In conclusion, children with ASD experience individualized obstacles in hospital environments, typically experiencing sensory overload, communication barriers, and anxiety overload. Through the continued use of nursing interventions, nurses can create a more supportive, trusting, and calming experience for this vulnerable population. These interventions not only encourage cooperation and comfort but also overall safety, fulfillment, and positive outcomes during hospitalization. Nursing care for children with ASD offers way more than just managing medical needs; it requires understanding each child's sensory profile, emotional responses, triggers, and really incorporating that high level of personalized care. By including individualized standards of care that address both physical and psychosocial needs, nurses maintain the truth of compassionate, integrated care. As healthcare continues to grow, nurses remain head of patient-centered care that ensures every child receives fair and effective care within the hospital setting.

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