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Cooperation with neuroatypical patients – legal and ethical aspects, strategies for minimising coercion

Współpraca z pacjentem o neuroatypowym rozwoju – aspekty prawne i etyczne strategie minimalizowania przymusu

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Abstract

Children with neurodevelopmental disorders, such as autism spectrum disorder and intellectual disability, often struggle to cope with new and stressful situations, especially during medical procedures, including diagnostic tests, wound care, vaccinations, and dental treatment. The requirement to undergo such procedures may provoke intense anxiety and result in non-cooperation. This lack of cooperation stems both from the individual's functional characteristics and the medical staff's inadequate preparation. Consequently, staff and caregivers may resort to physical restraint (direct coercion) to ensure safety or complete the procedure. While sometimes necessary, such measures carry a risk of inducing or intensifying psychopathological symptoms, traumatising the patient, and fostering aversion to future healthcare encounters. Given the increasing prevalence of neurodevelopmental disorders and the growing number of patients requiring specialised support, an appropriate approach is essential. This requires staff education, development of adequate legal regulations, and the application of practical strategies tailored to individual patient needs. This article aims to discuss the functional characteristics of children with neurodevelopmental disorders, present practical strategies for enhancing their cooperation with medical personnel, and analyse the legal aspects of using various forms of restraint. The aim is to provide practical guidance for medical staff and highlight the need for further research into effective and safe methods of supporting this particularly vulnerable patient group.

Keywords: neurodevelopmental disorders, coercion, patient compliance, children health services

Streszczenie

Dzieci z zaburzeniami neurorozwojowymi, takimi jak zaburzenia ze spektrum autyzmu i niepełnosprawność intelektualna, często doświadczają poważnych trudności w radzeniu sobie z nowymi i stresującymi sytuacjami. Trudności te stają się szczególnie widoczne przy korzystaniu z usług medycznych, które wymagają badań diagnostycznych lub obejmują takie procedury, jak opatrywanie ran, podawanie leków, szczepienia i zabiegi stomatologiczne. Konieczność poddania się tym procedurom może prowadzić do silnych reakcji lękowych u tych dzieci i braku współpracy zarówno z powodu specyfiki funkcjonowania, jak i niewystarczającego przygotowania personelu medycznego. Takie sytuacje stawiają personel medyczny i opiekunów w obliczu wyzwań, które mogą skutkować zastosowaniem przymusu bezpośredniego w celu zapewnienia dziecku bezpieczeństwa lub przeprowadzenia procedury. Rozwiązania te, choć czasem niezbędne, niosą ryzyko pojawienia się lub nasilenia objawów psychopatologicznych, w tym traumatyzacji i awersji do opieki zdrowotnej. W obliczu rosnącej wykrywalności zaburzeń neurorozwojowych i stale zwiększającej się liczby pacjentów wymagających specjalistycznego wsparcia konieczne jest zapewnienie im odpowiedniego podejścia. Wymaga ono edukacji personelu, rozwijania adekwatnych regulacji prawnych i stosowania praktycznych strategii opartych na zrozumieniu indywidualnych potrzeb pacjentów. Celem artykułu jest omówienie specyfiki funkcjonowania dzieci z zaburzeniami neurorozwojowymi, przedstawienie praktycznych strategii wspierających ich

współpracę z personelem medycznym i analiza aspektów prawnych dotyczących stosowania przymusu bezpośredniego, a także dostarczenie praktycznych wskazówek dla personelu medycznego oraz podkreślenie konieczności dalszych badań nad skutecznymi i bezpiecznymi metodami wspierania tej szczególnie wrażliwej grupy pacjentów.

Słowa kluczowe: zaburzenia neurorozwojowe, przymus, współpraca pacjenta, świadczenia zdrowotne dla dzieci

INTRODUCTION

Atypical development is a term referring to differences across many areas of functioning, including the nervous system, observable from the earliest stages of development⁽¹⁾. According to the latest diagnostic classification, the ICD-11 (International Classification of Diseases, 11th Revision) of the World Health Organization⁽²⁾, neurodevelopmental disorders encompass cognitive and behavioural conditions that manifest during the developmental period and are associated with significant deficits in acquiring and executing specific intellectual, motor, language, or social functions. This category includes disorders of intellectual development, autism spectrum disorder (ASD), attention deficit hyperactivity disorder (ADHD), stereotyped movement disorder, as well as developmental speech or language disorder, developmental learning disorder, and developmental motor coordination disorder.

Individuals with these diagnoses are often described as neuroatypical, a term that refers to a divergent developmental trajectory in which a child may experience difficulties acquiring certain skills or may not attain competencies typical of their peers.

Depending on the type of disorder, children of developmental age may have difficulties in establishing and maintaining relationships (ASD), cognitive functioning and learning (disorders of intellectual development), or sustaining attention, hyperactivity, and impulse control (ADHD). It is important to emphasise that the co-occurrence of neurodevelopmental disorders is more the rule than the exception⁽³⁾. In practice, this means that neuroatypical children may present symptoms of more than one disorder simultaneously, for example ASD and ADHD. In some cases, symptoms are present only at a subclinical level, meaning that despite exhibiting some signs, the child does not meet the full diagnostic criteria for a given disorder, which can further complicate the prediction of difficulties specifically associated with it.

Regardless of the established diagnosis, neuroatypical development brings numerous challenges both for the child's caregivers and medical personnel. As a comprehensive discussion of each neurodevelopmental disorder lies beyond the scope of this article, the following sections present only selected examples of difficulties and potential solutions based on a review of research on the situation of children with neuroatypical development, with particular emphasis on ASD. However, the proposed strategies may be successfully applied to a broader group of patients.

THE NEUROATYPICAL CHILD AS A PATIENT

Neuroatypical children, including those with ASD or intellectual disability, often experience significant difficulties in coping with new and unpredictable situations, which presents a challenge for healthcare professionals responsible for their care. The detection rate of neurodevelopmental disorders increased from 7.40% in 2019 to 8.56% in 2021⁽⁴⁾. This means that a growing number of children with these conditions will be using healthcare services, requiring medical staff to be adequately prepared to work with this group of patients. Although children often respond to unexpected situations with anxiety and resistance, mild persuasion and reassurance typically make cooperation possible. In neuroatypical children, however, these reactions are usually stronger, less predictable, and may persist despite explanations provided to the child⁽⁵⁾. Difficulties in responding to sudden situations, challenges with emotion regulation, impulse control, interpreting others' intentions, or sensory processing may intensify, particularly in stressful circumstances such as diagnostic examinations, injections, and other medical procedures.

When paediatric patients refuse to cooperate during necessary medical interventions or exhibit behaviours that pose a risk to themselves or others, and when other methods of establishing cooperation have failed, medical personnel or caregivers may be compelled to resort to direct coercion. Such experiences can have serious negative consequences for the child, including the exacerbation of psychopathological symptoms or even the development of post-traumatic stress disorder⁽⁶⁾. Children may perceive medical interventions as abusive, even when they are ethically and legally justified and performed to maintain their health or save life. Patients with difficulties interpreting the intentions of others, stemming from their neuroatypical development, are particularly vulnerable to such experiences. However, it is important to emphasise that coercive measures are not always necessary. In some children with neurodevelopmental disorders, resistance may stem from a lack understanding of the situation and from the use of inappropriate strategies by decision-makers. When medical staff apply approaches that help the patient orient themselves in the environment and understand the information provided, it allows the child to benefit from support, reduces anxiety, and improves cooperation.

Research indicates links between the level of skills and intellectual functioning of children with ASD and both the occurrence and type of so-called challenging behaviours, regardless of their underlying causes^(7,8). Challenging behaviours are defined as those that deviate from prevailing socio-cultural norms and, due to their intensity, frequency, or duration, may pose a threat to the physical safety of the individual or their surroundings, as well as significantly hinder everyday social functioning⁽⁹⁾. Lower intellectual functioning in a child with ASD is associated with an increased risk of such behaviours, as well as their more frequent occurrence or greater severity⁽⁷⁾. Masserano et al. demonstrated that hospitalised children with ASD, compared to patients without this disorder, were subjected to forced medication significantly more often, indicating an elevated risk of coercive interventions being used in this group⁽¹⁰⁾.

The literature further indicates that although healthcare professionals have basic theoretical knowledge of neurodevelopmental disorders, they often report a need for additional training in diagnosis and intervention, which would enable them to support patients more effectively^(11,12). The absence of established standards of care for individuals with neurodevelopmental disorders in healthcare institutions also serves as a driving force for undertaking research aimed at understanding their needs and experiences, which should ultimately lead to the formulation of specific recommendations for clinical practice in the future⁽¹³⁾.

In Poland, the Act of 28 July 2023 amending the Family and Guardianship Code and certain other acts introduced the obligation to implement child protection standards in institutions working with minors, including medical facilities⁽¹⁴⁾. These standards include risk identification, preventive measures, intervention procedures, and staff training. The Polish Ministry of Justice provides general guidelines and templates for these standards, which institutions may adapt to their specific needs; however, they do not include recommendations specifically addressing patients with neuroatypical development^(15,16).

Abilities related to understanding speech, interpreting environmental cues, and engaging in kind, supportive communication that helps reduce anxiety generally promote greater cooperation from young patients. Neuroatypical individuals often face challenges in both comprehension and expressive language, which can pose challenges for those interacting with them. Children with ASD, given the specific characteristics of the condition, require a tailored approach to communication⁽¹⁷⁾. Although this article focuses on patients in the developmental period, it is important to emphasise that without appropriate support (e.g. augmentative communication tools, adapted forms of communication) and therapy, communication difficulties do not diminish over time and may even intensify⁽¹⁸⁾.

The aim of this article is to discuss the challenges of providing medical care for children with neuroatypical development. It presents practical strategies to support patient

cooperation, alongside an overview of the legal aspects related to the use of direct coercion.

SELECTED FACTORS THAT MAY AFFECT THE COOPERATION OF CHILDREN WITH NEUROATYPICAL DEVELOPMENT WITH HEALTHCARE PROFESSIONALS

Reviews of studies on medical care for individuals with ASD and intellectual disability indicate that healthcare professionals often lack basic knowledge about the specific ways these individuals function, including potential challenges related to sensory processing and interpretation of their behaviours^(12,17). Parents report that manifestations of aggression or self-injury in children (e.g. using obscene language, hitting themselves or others, destroying objects) often represent attempts to communicate frustration or pain and serve as a form of self-soothing⁽¹⁹⁾. Individuals without knowledge of developmental disorders may misinterpret such behaviours and attempt ineffective interventions that can further escalate the situation.

Routine medical procedures that are difficult for individuals with ASD include examinations of the ears, throat, and genital organs, blood pressure measurement, blood draws and injections, as well as procedures requiring transitions between rooms^(20–22). Triggers of challenging behaviours in children with ASD are closely related to the diagnostic criteria of the disorder⁽¹⁷⁾ and include, among others:

- exposure to a new or unfamiliar environment and disruption of daily routines (associated with behavioural rigidity and difficulty adapting to change);
- misunderstanding of the situation, messages, and intentions of others (stemming from communication challenges and difficulties in understanding instructions and expectations – even in children who use spoken language);
- failure to account for the child's atypical sensory functioning and insufficient adaptation of the environment to their needs and abilities (which may lead to heightened defensive responses).

In the ICD-11 classification, which at the time of writing this article is in the process of being implemented in Poland, sensory difficulties have been included in the diagnostic criteria for ASD⁽²⁾. Atypical sensory functioning, including hypersensitivity or hyposensitivity to auditory, tactile, olfactory, or visual stimuli, may influence the pain responses of individuals with ASD. However, research findings in this area are inconclusive and suggest that individuals with ASD do not consistently display altered pain reactions or thresholds; rather, they exhibit differences in the subjective experience of pain and distinct behavioural responses to the same stimulus⁽²³⁾.

Tab. 1 presents selected difficulties characteristic of patient groups with ASD, ADHD, and intellectual disability.

A common feature of children with neurodevelopmental disorders is that they require short, simple, and often repeatedly delivered instructions, preferably supported by

Autism spectrum disorder	Attention deficit hyperactivity disorder	Intellectual disability
<p>Communication difficulties:</p> <ul style="list-style-type: none"> • problems verbally expressing pain/reporting symptoms • limited understanding of medical instructions • lack of response to name/commands <p>Sensory difficulties:</p> <ul style="list-style-type: none"> • atypical reactions to touch, light, sounds (medical equipment), smells (disinfectants) • difficulty tolerating taste/texture of medications <p>Need for routine and predictability:</p> <ul style="list-style-type: none"> • difficulty adapting to changes in appointment/procedure schedules • strong anxiety toward unfamiliar environments (clinic, hospital) and procedures • increased stress/protest <p>Atypical behaviours and responses:</p> <ul style="list-style-type: none"> • difficulty interrupting ongoing activities for a medical procedure • possible increase in self-stimulatory behaviours under stress <p>Difficulty understanding others' emotions and intentions:</p> <ul style="list-style-type: none"> • problems recognising that staff intend to help and interpreting their gestures/facial expressions 	<p>Impulsivity:</p> <ul style="list-style-type: none"> • difficulty waiting in the waiting room, trouble staying in place • interrupting during interviews, unexpected movements, attempts to touch medical equipment • difficulty restraining sudden reactions <p>Hyperactivity:</p> <ul style="list-style-type: none"> • increased need for movement • inability to sit/lie still during examinations, heightened activity under stress <p>Problems with maintaining attention:</p> <ul style="list-style-type: none"> • getting distracted during examinations, difficulty listening to and remembering instructions 	<p>Communication difficulties:</p> <ul style="list-style-type: none"> • limited vocabulary/language skills (problems describing symptoms) • difficulty understanding complex medical explanations and instructions <p>Susceptibility to anxiety:</p> <ul style="list-style-type: none"> • especially in new/unfamiliar situations <p>Problems with abstract reasoning:</p> <ul style="list-style-type: none"> • difficulty understanding concepts not directly observable by the child, e.g. bacteria or long-term benefits of treatment
<p>Problems with emotional self-regulation:</p> <ul style="list-style-type: none"> • strong outbursts of frustration, anger, or crying in situations of heightened arousal <p>Increased dependence on caregivers:</p> <ul style="list-style-type: none"> • greater need for support and presence of a parent/caregiver 		

Tab. 1. Symptoms of neurodevelopmental disorders causing difficulties during medical procedures. Own elaboration based on: World Health Organization⁽²⁾, Wilson and Peterson⁽¹⁷⁾, and Kolakowski and Pisula⁽²⁵⁾

clear visual aids, especially in stressful situations. Although the underlying causes of difficulties may vary depending on the type of disorder (e.g. in individuals with ADHD, problems with following instructions may result from difficulties in sustaining attention, as well as impulsivity or hyperactivity, whereas in individuals with intellectual disability they may stem from limited understanding of the situation), strategies based on visualisation will be helpful in both cases^(24–26).

Challenging behaviours in a child (e.g. pulling away during a blood draw), regardless of their cause, may result in the need for physical restraint, which in turn carries a risk of undesirable psychological consequences.

PRACTICAL APPROACHES AND STRATEGIES TO SUPPORT COOPERATION

Based on a literature review, Wilson and Peterson identified methods that facilitate medical care for individuals with ASD and categorised them into three groups: those related to healthcare personnel, external factors, and parents (Tab. 2)⁽¹⁷⁾.

Coping strategies for challenging behaviours can be divided into proactive and reactive approaches⁽²⁷⁾. Proactive strategies aim to prevent difficult situations and play a key role in preparing children with neurodevelopmental disorders for examinations or medical procedures^(17,28). The goal of these interventions is to minimise stress, anxiety, and resistance, while enhancing the child's sense

of safety and predictability before the situation occurs. Reactive strategies, by contrast, involve responding to a difficult situation once it has arisen, such as attempting to calm the child. According to current regulations, direct coercive measures, such as physical restraint, are classified as reactive strategies. This means that they are used only in response to an actual situation and must always be preceded by attempts to establish cooperation.

Based on available data^(17,29), guidelines have been proposed for supporting children with neuroatypical development in preparing for medical visits and procedures. In emergency situations, such as accidents, the application of these guidelines may be limited or impossible due to the need for immediate intervention.

The preparation process may begin at home, for example through role-playing activities that help familiarise the child with upcoming events⁽²⁸⁾. It is recommended that caregivers contact the medical facility prior to a scheduled visit to obtain necessary information that can aid in preparing the child⁽²⁹⁾. For particularly sensitive children, gradual exposure may be considered⁽²⁸⁾. This may include familiarising the child with the route to the facility, brief visits to the examination room, or prior introduction to staff and equipment. Visual schedules (e.g. calendars or plans) indicating the time remaining until the visit are also helpful. Educational aids, such as pictograms, photographs, or short videos illustrating the steps of the planned procedure – for example, a blood draw – can be useful^(26,29). Additionally, preparing a personalised social story that details what will

Staff-related	Healthcare facility-related	Parent-related
<ul style="list-style-type: none"> • Knowledge about the child • Knowledge about the specifics of the disorder • Preparation and flexibility • Slowing down and patience • Explaining the steps/stages of the examination or procedure • Providing reinforcements • Writing down instructions • Communication among staff 	<ul style="list-style-type: none"> • Providing: toys appropriate to the child's developmental stage, weighted blankets, noise-cancelling headphones, and sunglasses, visual supports and social stories, dimmed lighting • Staff supervision of the child • Shortening waiting times • Education and training of staff 	<ul style="list-style-type: none"> • Providing the child with reinforcers • Communicating important information about the child to medical staff • Preparing the child • Developing a script/social story • Breaking the examination or procedure into manageable stages

Tab. 2. Methods for supporting medical care of individuals with ASD neurodevelopmental disorders. Own elaboration based on: Wilson and Peterson⁽¹⁷⁾

happen, the emotions the child may experience, and appropriate behaviours can be highly beneficial^(13,30).

Communication with both the child and their caregivers plays a central role. Children respond better to short, specific, and positively framed instructions. It is therefore important to communicate what the child should do rather than what should be avoided. Both complex explanations and overly general information should be limited. Instructions should be simple and tailored to the child's developmental level. Children with complex communication needs, including nonverbal children or those with significant communication difficulties, often use augmentative and alternative communication (AAC) methods, such as communication books, symbols, or electronic communication devices. These tools serve as a form of "speech prosthesis", and the child has the right to use them during medical visits⁽²⁹⁾; their use should always be facilitated by medical staff⁽¹⁵⁾.

Ensuring structure and predictability during the visit is also crucial. Simple visual plans or schedules, such as "first-then" sequences (e.g. "First the prescription, then a sticker, and then you go home"), are often effective⁽²⁶⁾. Children generally feel safer when procedures are predictable, conducted in a familiar environment, with the same personnel, and performed in a consistent order. This allows them to anticipate when an activity will end and prevents the perception that an unpleasant situation will continue indefinitely.

Children with sensory processing difficulties may react very strongly to stimuli such as noise, light, or odours⁽²⁹⁾. Whenever possible, the environment should be adapted, for example, by reducing ambient noise (e.g. closing a window facing a busy street), dimming the lights, allowing the child to use noise-cancelling headphones, or providing familiar sensory toys. Before touching the child or using any medical instrument, the item should be shown to the child and an explanation given of what will happen next. Additionally, regarding sensory difficulties, it is important to rely on information provided by the child's caregivers.

Emotional support for the young patient, and sometimes also for caregivers experiencing strong emotions, is extremely important. The presence of a familiar person provides a sense of safety, especially if they remain calm, signalling to the child that the situation is under control. Information from caregivers about the child's so-called

"rescue items" or activities (objects or activities the child particularly enjoys and that help them cope during difficult moments, e.g. a favourite toy or song) can also be helpful. Staff should act empathetically and avoid rushing, which may be particularly challenging in the context of widespread staff shortages. While it may seem intuitive for many to say to the child, "Don't be afraid, it won't hurt", such reassurances often increase the child's anxiety. Moreover, they may not reflect reality, which can undermine the credibility of both the statements and the individuals making them⁽¹⁶⁾. Establishing contact with the child and alleviating tension in both the child and their caregivers may be facilitated by a calm tone of voice, a friendly smile, and a sense of humour. It is important to ensure that jokes are appropriate for the child and that medical staff never laugh at the child or at signs of their anxiety^(15,16).

Children, even the youngest and nonverbal, should be actively involved in the decision-making process regarding their treatment in ways that are adapted to their abilities. Research has shown that children's competence to provide assent for participation in clinical studies and to participate in treatment-related decisions depends not only on their age but also on the quality of the information they receive and the support provided by parents and medical staff⁽³¹⁾. Adapting language and allowing children to make simple choices can significantly increase their involvement in the decision-making process and strengthen their sense of responsibility for their own treatment. In clinical practice, children may be allowed to participate in minor aspects of procedures, such as choosing the site for a blood draw or the colour of a bandage. Such measures can promote cooperation during interventions.

The application of these proactive strategies may enhance cooperation among neuroatypical patients and reduce the likelihood of having to employ reactive strategies, including coercive measures⁽²⁸⁾.

LEGAL ASPECTS AND PREPARATION OF MEDICAL STAFF FOR THE CHALLENGES OF CARING FOR PATIENTS WITH NEURODEVELOPMENTAL DISORDERS

Adapting medical care standards to the individual needs and capabilities of patients with neurodevelopmental disorders

is essential for respecting their rights. Unfortunately, in Poland, training for medical staff on the specifics of caring for this patient group is limited. In medical and nursing specialisation programmes developed by the Centre of Postgraduate Medical Education, issues related to individuals with neurodevelopmental disorders are minimally addressed^(32,33). Education primarily focuses on general theoretical knowledge, while practical skills and preparation for working with patients with ASD are limited.

As a result, many physicians and other healthcare professionals are unable to communicate effectively with children with ASD or adequately support their caregivers. This issue is not unique to Poland; it has also been observed, for example, in the United States⁽¹²⁾.

According to current regulations in Poland, under the Act of 6 November 2008 on Patients' Rights and the Patients' Rights Ombudsman, consent for a medical procedure refers to the conscious and voluntary expression of will by a person with full legal capacity, or, in the case of minors, by their legal representative (usually a parent)⁽³⁴⁾. The ability to provide informed consent is assessed individually, taking into account the person's cognitive, communicative, and emotional development.

The Convention on the Rights of the Child adopted by the United Nations General Assembly in 1989 and ratified by Poland in 1991, established that children have the right to express their views on matters affecting them, and their opinions should be given due weight in accordance with their age and maturity⁽³⁵⁾. In clinical practice, this means that even when a legal representative has provided consent, medical staff should, whenever possible, also obtain the child's assent. Although assent is not legally binding, it carries significant ethical importance, reflecting respect for the patient's dignity, autonomy, and agency⁽³⁶⁾.

The Act of 28 July 2023 amending the Family and Guardianship Code and certain other acts imposed on institutions working with children, including healthcare facilities, the obligation to implement child protection standards⁽¹⁴⁾. This includes developing and enforcing internal procedures aimed at ensuring the safety of children during interactions with medical staff. These procedures are based on four fundamental pillars: identification of risk situations, preventive measures, intervention procedures, and staff education on recognising and responding to suspected child abuse.

The Polish Ministry of Justice has published materials supporting the implementation of these procedures, including "Guidelines for standards – children with special educational needs, including disabilities" and "Template for child protection standards for healthcare facilities to be adapted according to the specific characteristics of the institution"^(15,16). These documents serve as general recommendations for institutions responsible for developing their own organisational solutions. However, they lack detailed guidance on working with neuroatypical patients. As a result, healthcare professionals largely adapt existing care procedures

independently to meet the individual needs of children with neurodevelopmental disorders.

Supporting these children in medical decision-making requires not only goodwill but also the ability to adapt communication and environmental conditions to their individual needs^(17,29). A recommended practice is to follow the principle of shared decision-making, which involves collaboration among the physician, the patient, and – in the case of children – their legal guardians. This process includes jointly reviewing available treatment options, discussing potential benefits and risks, and selecting the best course of action. For a child with a neurodevelopmental disorder to actively participate in decision-making, it is essential to consider their developmental level and cognitive abilities.

In Alderson's studies on children's assent to surgery, most children expressed a desire to participate in decision-making alongside physicians and parents⁽³⁸⁾. Some children preferred to fully relinquish participation, while others wished to have a decisive role in the process.

In situations where a minor patient, exercising limited autonomy, makes decisions that could potentially threaten their well-being, it may be permissible – and sometimes even necessary – to limit their decision-making capacity⁽³⁸⁾. For example, a child with an intellectual disability who has sustained a head injury may refuse sedation required for a brain computed tomography scan. This does not entail disregarding the child's opinion entirely, but rather proportionally limiting their autonomy to protect their health, and in some cases, their life.

In the context of autonomy and decision-making, understanding the legal regulations regarding the use of direct coercion becomes particularly important, especially when patient assent is lacking. In Poland, these issues are governed by the Act of 19 August 1994 on the Protection of Mental Health⁽³⁹⁾. The law defines four forms of coercion: physical restraint, forced medication, immobilisation, and isolation. Such measures are permissible only when the patient poses a real threat to their own or others' life or health, public safety, or violently destroys or damages objects in their environment. According to the Act, direct coercion may only be applied to patients with mental disorders. Unfortunately, it does not include separate provisions for children, and even less so for neuroatypical children, creating numerous ethical and practical dilemmas in the care of minor patients. The use of direct coercion with children is a particularly complex issue that urgently requires legal regulation. The absence of clear regulations creates situations in which medical staff must act based on ambiguous rules, risking violating the rights of patients and children, or their own safety⁽³⁸⁾.

Children, due to their limited ability to understand complex situations and their strong sense of security derived from adults, primarily caregivers, are particularly sensitive to any form of restriction of freedom and the use of coercion. Improper use of such measures can lead to serious psychological and physical consequences⁽⁴⁰⁾. Therefore, direct coercion should be a measure of last resort, used only

	What to do	What to avoid
Preparation	<ul style="list-style-type: none"> • Explain the procedure in simple terms or using visual aids, such as pictures or social stories 	<ul style="list-style-type: none"> • Avoid acting unexpectedly and telling the child “don’t be afraid”
Communication	<ul style="list-style-type: none"> • Use simple, short, and concrete language. Employ AAC (augmentative and alternative communication) if necessary • Speak in a calm voice 	<ul style="list-style-type: none"> • Avoid raising your voice over the child, using complicated explanations, diminutives, or metaphors • Do not take personally any remarks the child makes under stress
Environmental setup	<ul style="list-style-type: none"> • Minimise noise, the number of people, and other sensory stimuli 	<ul style="list-style-type: none"> • Avoid intense sensory input
Caregiver support	<ul style="list-style-type: none"> • Allow the presence of a familiar person if the child wishes 	<ul style="list-style-type: none"> • Avoid rushing or conducting the examination without the parent present
Decision-making	<ul style="list-style-type: none"> • Offer choices whenever possible, e.g. which hand to use for a blood draw, which colour bandage to apply, etc. 	<ul style="list-style-type: none"> • Avoid issuing directive commands or making decisions for the child. Exceptions: life-threatening situations, or when the child and/or caregivers are unable to decide
Atmosphere	<ul style="list-style-type: none"> • Reward – praise for cooperation, give a sticker, etc. • Be patient and empathetic • Respond to the first signs of discomfort 	<ul style="list-style-type: none"> • Avoid rushing, hurrying, mocking, or criticising the child, e.g. “You’re so big and you’re crying”
Forewarning	<ul style="list-style-type: none"> • Forewarn the child about the next steps before carrying them out • Use visual aids, e.g. picture stories 	<ul style="list-style-type: none"> • Avoid sudden or abrupt actions – especially during direct physical contact
Credibility	<ul style="list-style-type: none"> • Be honest, for example: “Some people may find this uncomfortable” 	<ul style="list-style-type: none"> • Avoid giving false reassurances, such as “It won’t hurt”, if the procedure is likely to cause discomfort

Tab. 3. Strategies for supporting cooperation with neuroatypical patients during medical procedures. Own elaboration based on: Zespól do Spraw Ochrony Maloletnich^(15,16), Wilson and Peterson⁽¹⁷⁾, Koekemoer et al.⁽²⁶⁾, Cuvo⁽²⁸⁾, Straus⁽²⁹⁾

when other methods have failed. In accordance with applicable regulations, any measures taken must be as minimally invasive as possible and applied only for as long as the grounds for their use exist⁽³⁹⁾.

For example, briefly restraining a child to remove a foreign object from the nose, when other attempts to gain cooperation have failed, should be performed in a manner that does not violate the child’s dignity and ensures maximum comfort – for instance, in a room where the child is not exposed to stress from additional people being present. Both the child and caregivers should be informed in advance about the planned actions⁽³⁹⁾. Medical staff should be adequately trained in working with children and demonstrate high levels of empathy to carry out the procedures efficiently while ensuring the safety and well-being of the child.

RECOMMENDATIONS

Findings from previous studies^(17,26,28,29) and recommendations regarding child protection standards^(15,16) support the development of preliminary recommendations for the medical care of children with atypical development, which could also be implemented in the Polish context. These recommendations are summarised in Tab. 3.

SUMMARY

The increasing number of children with neurodevelopmental disorders presents new challenges for the healthcare

system, particularly regarding medical procedures that require patient cooperation. A lack of adaptation of care methods to the specific needs of these children may necessitate the use of coercion, which carries the risk of serious psychological consequences.

Performing medical procedures on patients with neurodevelopmental disorders requires a personalised, tailored approach. Research shows that even the youngest patients with complex communication needs can express their views when provided with appropriate environmental support⁽⁴¹⁾. Therefore, it is essential for medical staff to adapt communication to the patients’ abilities, to take their opinions seriously, and to involve them in the decision-making process^(17,29).

Strategies such as early preparation of the patient and family, appropriate communication, the use of visual aids (e.g. social stories and schedules), attention to sensory needs, and emotional support can significantly enhance cooperation and minimise the need for coercive measures^(24–26).

Legal regulations concerning the use of direct coercion outside psychiatric hospitals require urgent clarification in Poland, particularly regarding minor patients. The absence of precise guidelines, combined with insufficient training of medical staff in neurodevelopmental disorders, constitutes a major barrier to providing ethical and professional care⁽¹³⁾. Polish law, under the Act of 6 November 2008 on Patients’ Rights and the Patients’ Rights Ombudsman, governs the principles of obtaining informed consent for health services, stipulating that for minors, the decision is made by

a legal representative⁽³⁴⁾. The issue of child assent is not regulated by Polish law; however, in light of the considerations presented, respecting the child's autonomy through seeking assent and involving the child, according to their abilities, in shared medical decision-making is particularly important⁽³⁵⁾.

The child protection standards introduced in Poland in 2023 require medical institutions to develop and implement procedures that ensure the safety of children and prevent violence or abuse in interactions with medical staff. Implementation of these standards varies depending on the type of facility, management engagement, and available personnel resources and competencies⁽⁴²⁾.

The authors express the sincere hope that, even before formal regulations are fully established, this article will contribute to improving the situation for both neuroatypical patients and the healthcare professionals who care for them.

Conflict of interest

The authors do not report any financial or personal connections with other persons or organisations which might negatively affect the content of this publication and/or claim authorship rights to this publication.

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Author contribution

Original concept of study; collection, recording and/or compilation of data: KP. Analysis and interpretation of data; writing of manuscript; critical review of manuscript; final approval of manuscript: KP, PS.

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