



REVIEW ARTICLE

Adolescents with Epilepsy: Special Consideration for Teens with Epilepsy, Prevention of Injuries and Nurses Role

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Abstract

It is well recognized that young individuals with neurological impairments, such as epilepsy, receive less suitable assistance than young people with other chronic diseases. The period (between the ages of 13 and 19) surrounding the transition to adult services is particularly crucial for promoting young people's continued control and self-care. Epilepsy-specific biological, psychosocial, and biological variables can both hinder and facilitate the sharing of information and the development of self-care behaviors. The goals of the present review were to explain how young people with epilepsy, aged 13 to 19 years, and their parents experienced sharing information in healthcare settings, to identify characteristics that affect both good and negative healthcare communication, and identify what is known to be beneficial in doing so. Seizures, which are frequent bursts of electrical activity in the brain are brought on by epilepsy. By the time they are adolescents, almost two-thirds of all children with epilepsy outgrow their seizures. Epilepsy, however, maybe a lifelong condition for certain people. To better comprehend their child's condition and treatment, parents should work together with their medical professionals.

Keywords: Epilepsy, Adolescents, Transition

Introduction

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both good and negative healthcare communication, and identify what is known to be beneficial in doing so.

Seizures, which are frequent bursts of electrical activity in the brain, are brought on by epilepsy. By the time they are adolescents, almost two-thirds of all children with epilepsy outgrow their seizures. Epilepsy, however, maybe a lifelong condition for certain people. To better comprehend their child's condition and treatment, parents should work together with their medical professionals.

The operational (practical) clinical description of epilepsy, suggested by the ILAE (International League Against Epilepsy) Task Force in 2014, was meant to be

a disease of the brain described by any of the conditions mentioned below:

- At least two spontaneous (or reflex) seizures, more than 24 hours apart.
- One unprovoked (or reflex) seizure, with a 10-year risk of subsequent seizures equal to the overall recurrence risk (at least 60 percent) after two unprovoked seizures.
- Epilepsy syndrome diagnosis.¹

Facts about epilepsy

- Children aged 14 years and under account for 25 percent of all new cases of epilepsy.
- More than 20 distinct forms of seizure activity are referred to as epilepsy.
- Seventy percent of epilepsy cases have no recognized cause.
- Epilepsy is a physical ailment. It is neither a symptom of mental disease nor of low intelligence.
- Even if they have seizure disorders, kids may still be active, play sports, and generally enjoy life.²

Symptoms of seizures in young patients

- Fast eye blinks and staring
- Breathing problems
- Sudden jerks (which are mistaken as a child getting afraid)
- Going mute and unresponsive to words
- Trembling
- Bladder control issues
- Falling unexpectedly and without cause
- Rhythmically nodding the head
- Showing signs of confusion or haze

Young children experience seizures and their symptoms quite differently from adults. The significance of childhood epilepsy stems from the still-developing brain. If seizures are not treated promptly, they can result in epileptic encephalopathy, which stunts a child's growth and results in severe cognitive and motor impairments. Therefore, it is crucial to identify seizures in youngsters at the earliest and to begin treatment immediately.³

Special considerations for teens with epilepsy

Transitioning to adulthood

As children mature into adults, they assume responsibility for themselves. Of course, this is also true for children with medical conditions such as epilepsy. As part of the care of an adolescent with seizures, it is important to facilitate this transition. Factors that contribute to successful transition of care from pediatric to adult providers include:

Adolescent's comfort with managing medication,

- Obtaining medication refills, and scheduling appointments.
- Knowledge of important epilepsy-related information (eg, seizure frequency),
- Comfort talking to care providers and some understanding of health insurance.

Encourage adult caregivers to allow the adolescent to progressively take responsibility for their care. Begin by encouraging the patient to be responsible for taking their own medications. A pill reminder box can provide a way for parents to inconspicuously monitor adherence. Address the conversation about care to the adolescent and let them lead the discussion about their care.

As time progresses, parents can step out of the room while the adolescent discusses issues of care with the patient. Because the parents are still legally responsible for the healthcare decisions, they have to be included, but for older adolescents, this can be done after you have had a chance to discuss issues with the patient (alone) first.⁴

Mainstream provision

Children in standard education often go from the primary to secondary sectors at the age of eleven. For many kids, moving on to secondary school is a significant milestone. They are relocating to a much bigger school where it will be necessary to forge new bonds with the students and faculty. At the age of transfer, there may be particular issues for kids who have epilepsy, though majority of these issues may be resolved effectively. The most crucial and maybe obvious factor is selecting the school that will best serve their requirements.

Parents may learn more by personally visiting different schools to find out whether there are any plans in place

for dealing with students who experience epileptic seizures. School facilities such as staff education in connection with students' medical issues, care and administration of medicine if a 'school day' dosage is necessary, and special needs provision should be the subjects of inquiry.⁵

Managing epilepsy while at school

- Educating the school staff, teachers, nurses, and students about epilepsy, its treatments, seizure first aid, and any possible stigma associated with the illness.
- Administering first assistance and putting the seizure action plan instructions into practice (including the use of rescue medications).
- Recognizing the value of medication adherence and supporting students who regularly use prescription medicines.
- Helping students avoid potential seizure triggers like flashing lights or other scenarios detailed in the seizure action plan.
- Monitoring and treating any underlying physical conditions, particularly those involving the mind, such as depression.
- Students whose medical issues prevent them from attending class or succeeding academically should get case management assistance.
- Directing pupils who have uncontrollable seizures to local medical services.
- To make sure that children with epilepsy can get the free and suitable education that the law provides for them, it is important to be aware of the laws relating to disability, medical conditions, and special education.
- Monitoring student behavior to stop epileptic students from being bullied.

Adherence

Every attempt should be made to convey to children suffering with epilepsy the significance of taking their antiepileptic medications as directed without becoming overwhelming. They occasionally forget, which is very normal, and in such instances, it should not be turned into a huge issue.

Sports & leisure

The pursuit of a vibrant social life, including participation in all customary athletic and social activities should be encouraged for young people with epilepsy.

As teenagers develop, their interests often drive them to more daring activities than they did as kids. Sports activities grow more competitive, and different levels of skill are more readily visible. It is crucial to make sure the children understand that the only thing that sets them apart from their peers is that they occasionally lose consciousness, which, if the seizures are convulsive, can result in them falling to the ground as their muscles twitch out of control. They are just like everyone else when they are not having a seizure. Therefore, there should only be a few limitations on the type of sports kids may enjoy and engage to a higher level during seizure-free periods if the only time that epilepsy is obvious is when a seizure happens.

Despite doing all in our power to promote sports participation, it is necessary to acknowledge that some sports are inappropriate for persons with epilepsy. For people who are prone to momentary unconsciousness without prior notice, sports like scuba diving and climbing are plainly inappropriate. It is considered preferable to focus on promoting participation in the numerous sports that may be completely enjoyed than lamenting what cannot be done.

The worst error that companions may make is to be overly watchful and ruin the experience. Young people tend to grow more independent as they get older; so attempts to curb their natural need for enjoyment can lead to rebellion, which has all the associated issues.⁶

Peer group pressure

Children may come under a lot of pressure from their classmates and peers to disobey rules and/or advice recommended by adults. This pressure may lead people with epilepsy to experiment with methods other than those they have used for years to control their seizures.

They frequently give in to ideas like skipping doses of medication and experimenting with alcohol because they don't want to be perceived as being different.

On occasions, peer pressure might push people to engage in unlawful actions like illegal driving of cars. Regrettably, yielding to such pressure could be disastrous. The best course of action in this situation is to inform people about epilepsy by providing a basic summary and explaining why certain activities are undesirable.⁷

Sexuality

It must be acknowledged that young people today start having sexual relationships at a young age. This presents

a variety of questions, including the rationale for contraception as well as, in the case of epilepsy sufferers, the potential adverse effects of antiepileptic medications and how they may influence other medications, such as oral contraceptive pills.

It is crucial that females seek medical counsel before getting pregnant or as soon as an unintended pregnancy is suspected since some antiepileptic medications might have an adverse effect on the growing fetus.⁸

Psychological reaction to epilepsy

Teenagers may be more prone to psychological issues in general, and anxiety and sadness in particular, if they feel they have little to no control over unfavorable events. Teenagers with epilepsy, who undoubtedly feel like they have little control over their life, may have a far lower feeling of control (or mastery) over their lives than their peers who do not have the condition. It has been demonstrated that having a low feeling of mastery is associated with high levels of worry, despair, and low self-esteem. The more they think that forces outside of themselves are in charge of their health, more they may experience anxiety, depression, and illness.⁹

Prevention

- A quarter of epilepsy cases are thought to be avoidable.
- The best method to prevent post-traumatic epilepsy is to avoid head traumas, such as those caused by falls, auto accidents, and sports injuries.
- The frequency of new cases of epilepsy brought on by birth trauma may be decreased with proper prenatal care.
- By lowering a sick child's body temperature with medicines and other methods, the risk of febrile seizures may be reduced.
- The primary objective of the prevention of epilepsy-related stroke is the reduction of cardiovascular risk factors, such as efforts to avoid or control high blood pressure, diabetes, and obesity, as well as refraining from cigarettes and excessive alcohol use.
- Tropical locations, mostly low- and middle-income countries, are prone to central nervous system diseases, which usually result in epilepsy. Elimination of parasites in these environments and education on how to avoid infections can be effective in reducing epilepsy worldwide. For example, cases due to neurocysticercosis.

No child or teen should ever swim unsupervised

- All small children should be closely watched by their parents, who should always be nearby if they are in water.
- With a lifeguard present, older children and teenagers are permitted to swim with a companion. The companion should be able to see a seizure and call for assistance if necessary.
- In murky water, more vigilance should be exercised. When swimming or boating in lakes, ponds, and seas, life jackets should be worn since it could be difficult to detect a kid who drowns in hazy water.

Other safety precautions

- Kids should always wear a safety helmet while riding bikes, skating, or rollerblading.
- Heights should be avoided by children with epilepsy. They should not sleep on a bunk bed's upper bunk, climb trees, or use high playground equipment.
- To avoid a burn, water heaters should only be adjusted to 120 degrees Fahrenheit.
- Without an adult present, older children should not use the stovetop to cook.

Greater precautions, such as prohibiting bike riding and aquatic sports, may be required if a child's seizures are not well managed and happen frequently. Wearing a safety helmet while participating in any physical activity may assist certain kids who experience frequent seizures that lead to falls and accidents.¹⁰

Role of Nurse

Nurses' primary objective is

- Injury avoidance
- Seizure management
- Ensure adequate psychosocial adjustment
- Inform others about the issue
- Attempt to lessen the risk of problems

Injury prevention

- Ease the individual onto the ground to avoid needless harm.
- Ensure privacy if there are observers present.
- Use a pillow or pad to shield the person's head.
- If the apparel is too tight, loosen it up.

- Remove any furnishings from the location that might endanger the individual further.
- Remove pillows and elevate the bed edges if the person is in bed.
- To encourage pharyngeal secretion drainage, tilt the person's head forward while turning them to the side.
- Make sure suction equipment is available to remove secretions.
- NEVER try to open a clenched jaw.
- NEVER try to put something in the person's mouth.
- DO NOT try to hold someone who is having a seizure in place.
- Give safety instructions in the event of a drug overdose.
- Encourage the individual to maintain a drug and seizure log.¹¹

Conclusion

The most prevalent chronic neurologic condition in children is epilepsy, which has a variety of clinical presentations. Children who have epilepsy consistently have the predisposition to experience seizures. With an estimated 10.5 million children afflicted globally, childhood epilepsy is a critical concern for global health. In youngsters, the prevalence peaks between the ages of 5 and 9 years. Eighty percent of these children reside in underdeveloped nations, including Nigeria. In impoverished countries, around 80%-90% of epileptics lack access to therapy.

Conflicts of Interest

None

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Reducing fears associated with seizures

- Stress the significance of treatment compliance.
- Help in identifying the causes of seizures so the person may take preventative measures, such as avoiding emotional stress, environmental stressors, take precautions during the start of menstruation, and fever.
- Encourage a regular diet, exercise program, and rest.
- Encourage them to stay away from photic stimuli like bright, flashing lights. If it is impossible to avoid it, covering one eye or donning dark glasses can assist to decrease the impact.
- Promote stress management training.

Coping mechanisms

- Help people understand epilepsy and its limits by offering therapy.
- Push people to engage in social and leisure activities.
- Inform the person's family about the signs, symptoms, and treatment of epilepsy.

Care

- Dilantin's adverse effect of gingival hyperplasia (gum overgrowth) can be prevented and controlled by promoting routine dental care, teaching patients about oral hygiene, and massaging their gums.
- Encourage consultation with a doctor if any medication modifications are necessary.
- Inform the patient about the toxicity and side effects of any prescription medicine.

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