



EDUCATORS TRAINING MANUAL

WHAT IS EPILEPSY ?

- Seizures are caused by a temporary change in the way the brain cells work.
- The brain is just like a computer, which consist of a vast network of nerve cells, called neurons.
- Billions of electrical messages are fired between these cells, controlling what we think, feel, do, etc.
- The body has it's own inbuilt balancing mechanisms which ensure that messages usually travel between cells in an orderly way.
- Sometimes, an upset in the brain chemistry causes messages to get scrambled.
- When this happens the neurons fire off faster than usual or in bursts.
- This disturbed activity triggers seizures.

WHAT IS EPILEPSY?

- It is a physical condition characterised by unusual electrical activity in the brain. It is a symptom of a neurological disorder and shows itself in the form of seizures.
- Epilepsy is a disorder, not a disease and is not contagious.

EPILEPSY IS...

- the tendency to have repeated seizures (“fits”, “attacks”)
- caused by a disturbance in the electrical activity of the brain cells
- the most common serious neurological condition affecting at least 1 in 200 people
- common in childhood, but can start at any age

CAUSES OF EPILEPSY :

Idiopathic :

Can not identify
underlying cause/
disorder

Symptomatic :

Can identify underlying
cause/disorder

- Idiopathic (66%)
- Vascular (11%)
- Congenital (8%)
- Trauma (5%)

- Tumours (4%)
- Degeneration (3%)
- Infections (3%)

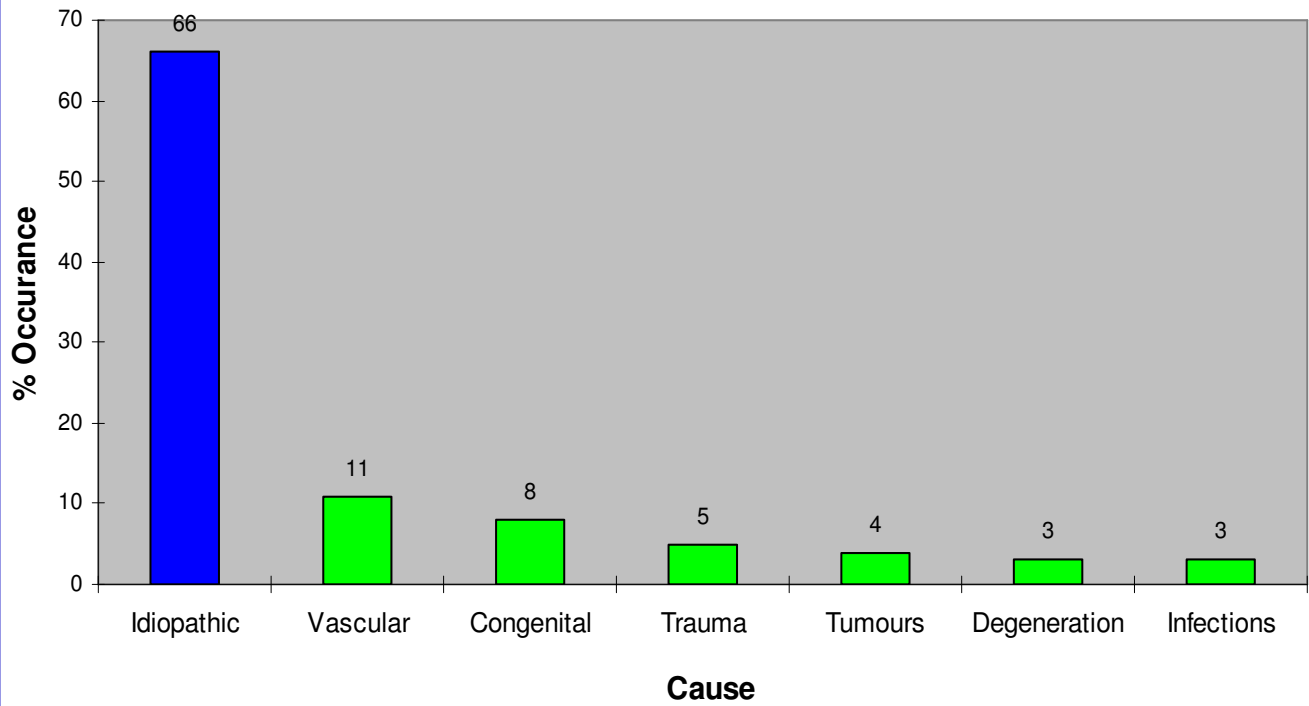
CAUSES OF EPILEPSY

Remember - over 50 % of cases have no known causes

causes

- Head injury
- Brain infections, e.g. Encephalitis
- Cerebral hemorrhage
- Drugs and alcohol
- Biochemical imbalance
- Tumours
- Degeneration
- Congenital

CAUSES OF EPILEPSY :

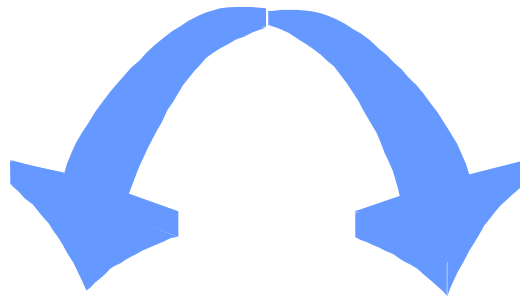


POSSIBLE TRIGGERS

- forgotten or incorrect medication
- fever
- lack of sleep
- stress and excitement
- boredom
- alcohol and drugs
- photosensitivity (rare and controlled)
- startle response
- illness
- hormones
- heat and/or humidity

TYPES OF EPILEPSY :

The type of seizure will depend on the part of the brain where the abnormal electrical discharge arises. There are over 40 types of seizures, most are classified within 2 main categories



Partial Seizures :

occur when the excessive electrical activity in the brain is limited to one area.

Generalised Seizures :

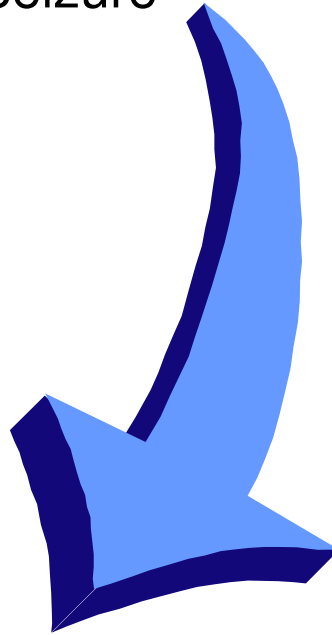
occur when the excessive electrical activity in the brain encompasses the entire organ

GENERALISED SEIZURES :

- Generalised Tonic-Clonic Seizure
- Absence
- Myoclonic
- Tonic
- Atonic

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- Formerly known as “grand mal”
- Body stiffens
- Person may shout
- Person falls

Tonic Stage

- Convulsions
- Asphyxiation
- Incontinence
- Duration of a few minutes

Clonic Stage

GENERALISED SEIZURES :

- Generalised Tonic-Clonic Seizure
- Absence
- Myoclonic
- Tonic
- Atonic



- Also referred to as “petit-mal”
- Common in children
- Blank stare and failure to respond
- Slight twitching, blinking or chewing
- Duration of a few seconds
- Usually ceases to exist in adulthood
- Fairly easy to control with medication

GENERALISED SEIZURES :

- Generalised Tonic-Clonic Seizure
- Absence
- Myoclonic
- Tonic
- Atonic



- Sudden, brief, involuntary muscle jerks
- Single or multiple jerks
- Jerking of different body parts
- Falling ?

GENERALISED SEIZURES :

- Generalised Tonic-Clonic Seizure
- Absence
- Myoclonic
- Tonic
- Atonic



- Muscles stiffen
- Falling
- May involve a shout

GENERALISED SEIZURES :

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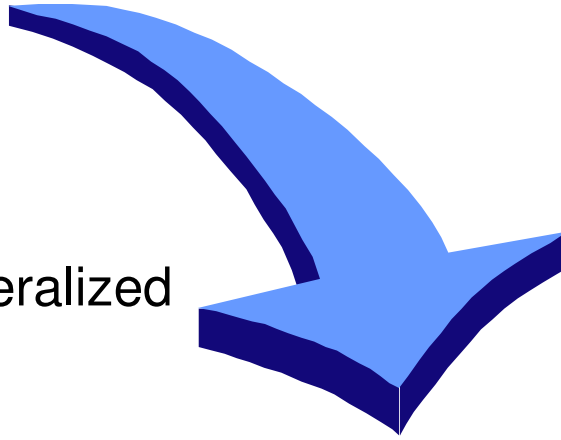
- Muscles lose all tone
- Person falls
- “Drop attacks”

PARTIAL SEIZURES (FOCAL) :

- Simple Partial
- Complex Partial
- Secondary generalized

PARTIAL SEIZURES :

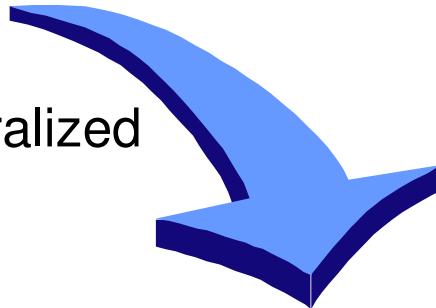
- Simple Partial
- Complex Partial
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- Affects movement, sensation in part of the body controlled by the affected area of the brain
- “Funny” feeling, numbness or jerking of one limb or down one side of the body
- “Aura”
- No alterations in or loss of consciousness
- Altered sense of perception

PARTIAL SEIZURES :

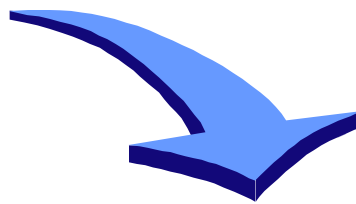
- Simple Partial
- Complex Partial
- Secondary generalized



- Originate in temporal lobes of brain.
- May start with an “aura”
 - visual, auditory, taste, etc.
- Non-convulsive.
- Impaired or altered states of consciousness
- Abnormal movements
 - plucking at clothes, lip smacking, etc.
- Wander about aimlessly
- Duration of few seconds to few minutes

PARTIAL SEIZURES :

- Simple Partial
- Complex Partial
- Secondary generalized



- Electrical activity in brain may spread so that whole brain becomes affected
- Partial seizure becomes a generalised seizure
- Known as secondary generalised seizure

HOW TO RESPOND TO DIFFERENT TYPES OF SEIZURE ACTIVITY

Absence seizures

- Be understanding
- Repeat the teaching missed
- Note that the absence happened

Tonic Clonic Seizures

- Protect from injury
- Cushion the head
- Help breathing by turning the person on the side
- Stay until full recovery
- Do not restrain bodily movements
- Do not place anything in the person's mouth
- Check for any injury

Complex Partial Seizures

- Do not try to stop the seizure
- Talk reassuringly to the person
- Be understanding
- Guide the person from danger

HOW EPILEPSY AFFECTS DAILY LIFE

- Unpredictable seizures cause disruption / interruption of daily routines.
- Psychological and social problems are often more significant than the condition itself.
- Fear underlies most problems experienced by people with epilepsy, resulting in a sense of insecurity and lack of ability to cope.
- Ignorance, fear and stigmatisation on the part of onlookers cause greater distress than the condition.
- Abilities and intellect of people with epilepsy are not perceived to be equal to that of people without.

THE EFFECT OF A CHILD'S EPILEPSY ON THE FAMILY

- a change in relationships with family, friends, school
- change of focus for family and family life
- emotional response of parents
 - anger
 - shock
 - depression
 - grief
 - guilt
 - shame
 - play condition down
 - over-protection
 - bereavement
- marriage strain/bonding
- feelings of helplessness
- perceived neglect by siblings
- management of seizures
- frustration with education & health services and medical services
- fear for child's safety
- fear for the future

THE IMPACT OF EPILEPSY ON BEHAVIOUR AND EMOTIONAL DEVELOPMENT

“Children require a stable upbringing to develop emotionally and anything which threatens that stability may have negative consequences for subsequent development and psychological health. Epilepsy, with the unpredictable and at times intense nature of its symptoms, poses such a threat.”

Pamela J Thomson
National Society for Epilepsy, 1995

SOME EFFECTS OF EPILEPSY ON THE CAPACITY TO LEARN

Epilepsy, its treatments and the associated levels of learners' self confidence may have significant effects on:

- Speed of information processing
- Memory recall
- Vigilance
- Alertness
- Sustained and focused attention
- Motor fluency
- Language fluency

KNOWLEDGE IS POWER

KNOW...

- What types of seizures can occur
- What factors may trigger seizures
- Correct first aid for seizures
- How to record times, duration and types of seizures
- What pre-seizure signals to look out for
- What feelings to expect from children with epilepsy
- That epilepsy affects daily life in several ways

AS TEACHERS WE NEED

- Awareness of the condition of epilepsy
- Generosity of mind and spirit in our role as teacher
- High expectations of our students
- Access to support and assistance

IMPLICATIONS FOR SCHOOL

How can school assist

- Positive attitudes towards children and young people with disabilities
- An atmosphere of appropriate high expectations, high quality planning and professional support on an individual basis
- Encouragement of reasonable risk taking

Relationships with pupils

- Understanding teachers willing to learn about epilepsy
- Awareness of the potential stigmatising effect on some pupils
- Awareness of the potential isolation effects they face
- Awareness of the potential dangers they face
- Willingness to confront curriculum challenges
- Willingness to deal with the safety issues
- Willingness to go on listening, learning and responding
- Responding to individual's needs and the way epilepsy affects them

RELATIONSHIPS WITH PARENTS

- Open, welcoming, trusting relationships
- Willingness to listen to parents
- Willingness to report regularly to parents
- Willingness to support as a partner in relation to work with other professionals

TEACHING METHODS

The need for

- Formal structures
- Repeated information presented in short sentences using familiar language
- Direct support when the child is working in a group setting

The need for skilful handling of the child whose behaviour is disturbing to the rest of the class without:

- Further affecting the child's self esteem
- Further risking the child's relationship with the rest of the class
- Drawing unhelpful additional attention to the child

CLASSROOM MANAGEMENT

- Be informed and unprejudiced
- Be prepared for a seizure
- Deal appropriately with the emotions of the child with epilepsy
- Foster a culture of acceptance in the classroom
- Be prepared to administer anti-epileptic medication (anti-convulsants)
- Do not lower your expectations or standards
- Do not impose blanket restrictions
- Encourage participation in activities that improve his self-image
- Be aware of side-effects of certain medication
- Be aware of all safety aspects at school

Ensure that you and all the children receive adequate training regarding epilepsy.

MANAGEMENT AND NEEDS OF OTHER CHILDREN

- Stay calm
- Ensure the child is out of harm's way
- Send for another adult
- Reassure other children and, if necessary arrange for other children to leave the room
- Follow first aid procedure
- Let seizure run its course.
- Reassure and inform the child while recovering
- Following a tonic clonic seizure put the child in recovery position
- Consider simple explanation of epilepsy for the remaining children
- Allow the child to rest as necessary
- Record information about seizure

TIPS FOR TEACHERS

DO:

Accept the child for what he / she is – a unique individual who happens to have a tendency to have seizures- and encourage him to do the same

- Support the child and help him develop confidence to deal with different situations
- Ensure that each child in the class has a fair share of your time, interest and energy
- Concentrate on what he can rather than can't do
- Bear in mind that it is natural to experience frustrations with children, but TLC always works!

DO NOT:

Rush in to help unless the child obviously needs it

- Restrict the rest of the class because of the child with epilepsy
- Treat the child with epilepsy differently from the other children
- Allow the child to think of him/herself as an invalid or use epilepsy as an excuse
- Be afraid to involve colleagues, parents and medical professionals in your classroom management

THE TEACHERS SHOULD KNOW ...

- **What to do when a child has a seizure.**
- **What medication the child takes.**
- **How to administer the medication. How much and when.**
- **The possible side effects of the medication and how it can impact on the child's learning.**
- **That it is very important to record all symptoms.**
- **How to treat epilepsy as a natural occurrence.**
- **That epilepsy is not synonymous with learning difficulties.**
- **That a child with epilepsy can experience many different emotions and that this can affect the self-esteem of the child.**

PREVENTION OF DISCRIMINATION

- **Focus on strengths rather than weaknesses.**
- **Child-to-child workshops / games.**
- **Adapt tasks to ensure that every child can take part in all the classroom activities.**
- **Ensure that all the other children are well educated and informed about epilepsy. This will lead to better acceptance of the condition.**
- **Actively deal with any forms of discrimination.**

HOW TO USE AIDS IN TEACHING CHILDREN ABOUT EPILEPSY

- **Story telling**
- **Books / pictures**
- **Collage**
- **A visit to a neurologist**
- **Games**
- **Letting a child with epilepsy talk about it**
- **Video's**
- **Puppets**