

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



Shendi University



Faculty of Graduate Studies and Scientific Research

Research about:

**Assessment of Nurse's Knowledge and Attitude
Regarding Care of Epileptic Patient in Elmek
Nimer University Hospital 2016**

A thesis submitted as partial fulfillment for the requirement of
Msc of Medical Surgical Nursing.

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الآية

قال تعالى:-

﴿اللَّهُ نُورُ السَّمَاوَاتِ وَالْأَرْضِ مَثَلُ نُورِهِ كَمِشْكَاةٍ فِيهَا
مِصْبَاحٌ الْمِصْبَاحُ فِي زُجَاجَةٍ الزُّجَاجَةُ كَأَنَّهَا كَوْكَبٌ دُرِّيٌّ
يُوقَدُ مِنْ شَجَرَةٍ مُبَارَكَةٍ زَيْتُونَةٍ لَا شَرْقِيَّةٍ وَلَا غَرْبِيَّةٍ يَكَادُ
زَيْتُهَا يُضِيءُ وَلَوْ لَمْ تَمْسَسْهُ نَارٌ نُورٌ عَلَيَّ نُورٍ يَضِيءُ اللَّهُ
لِنُورِهِ مَنْ يَهْتَكُ وَيَضْرِبُ اللَّهُ الْأَمْثَالَ لِلنَّاسِ وَاللَّهُ بِكُلِّ شَيْءٍ

عَلِيمٌ

صدق الله العظيم

سورة النور - الآية (35)



Dedication

*To the guidance of my life who
Decorates my sky with her continuous brilliance*

Dear Mother,,,

*To my unique source of success, the person who always support me with
all my needs*

Dear Father,,

*It's insipid without you to anyone who one day drew a smile on my face,
the person who perfume my life with happiness*

My husband,,

Ustaz: Abdelbagi Altaj,,

*To their love of being in my veins and meditates they be mentioned my
heart*

My children (Duaa & Alaeldeen)

*To the colors of my life, those whom always be with me in my happiness
and Sadness and facilitate my pathway to success*

Dear Sisters and brothers,,

They catch up and grow.

To who lead me to the way of successful

My Professors

To all those who respect and help me in my life.

To my colleague



Acknowledgement

*First of all I thank Allah that for giving me the strength and
patience to perform this work.*

Sincerest appreciation and Post gratitude to

Dr. Mohammed Jabr eldar

For his patience and guidance throughout the work.

A special Word of thanks:

*Staff of medicine nursing staff , intensive care unit and coronary
care unit in Elmak Nimer hospital for their greater helps.*

*And finally I would like to extend our thanks to our families,
friend's classmate.*

ملخص البحث

الخلفية:

الصرع مجموعة متلازمات تتميز بتكرار نوبات التشنج (1) وله تأثير علي كل أجهزة الجسم وبالتالي تحتاج الي تشخيص سريع ومبكر وتدخل سريع لتجنب المضاعفات (2)أغلبية المرضى الذين يعانون من التشنج يتطلب دخولهم وحدة العناية المكثفه ، تصميم دراسة:

عملت هذه الدراسة المقطعية المتقاطعة الوصفية في مستشفى المك نمر الجامعي في فترة من (أغسطس إلى نوفمبر/ 2016) لتقييم معرفة وسلوك الممرضين حول العناية بمرضي الصرع. شملت هذه الدراسة 100 من الممرضين، تم جمع البيانات باستخدام استبيان مغلق الاسئلة مكون من جزئين .بعد جمع البيانات تم تحليلها يدويا ومن ثم أستخدم برنامج التحليل الحزمي للبيانات (SPSS) بالحاسوب إصدار (22). الأهداف:

لتقييم معرفة وسلوك الممرضين حول العناية بمرضي الصرع.

النتائج:

توصلت هذه الدراسة بأن أغلب الممرضين (83 %) كانت لديهم معرفة بتعريف الصرع، (76%) لديهم معرفه حول أسباب الصرع، أغلبية الممرضين (80%) لديهم معرفة حول علاج الصرع وأكثر من النصف (67%) من الممرضين كان لديهم معرفة حول مضاعفات الصرع.

حول سلوك الممرضين: توصلت الدراسة بأن أغلب الممرضين كان لديهم سلوك إيجابي بخصوص احتياطات لنوبات التشنج، العناية التمريضية أثناء لنوبات التشنج، كان لديهم سلوك إيجابي بخصوص مفهومهم حول الصرع.

التوصيات:

على إدارة المستشفى أن تعمل على إقامة الدورات التدريبية للممرضين وان تعمل على زيادة معرفتهم حول مرض الصرع وكيفية التدخل السريع لاسعاف المريض وذلك باستخدام الملصقات الورقية والصور والمخططات وإقامة المحاضرات بصورة دورية وورش العمل.

Abstract

Background: Epilepsy is a group of syndromes characterized by recurring Seizures.⁽¹⁾ The majority of patients experiencing seizures in the ICU, their need rapid diagnosis and emergency care.⁽²⁾

Study design: This descriptive cross sectional study done in Almak Nimer university hospital during period from (August to November 2016) to assess nurses knowledge and practice about intravenous medication administration. 100 nurses work during all shift were participated in the study, Standard closed ended questioner was been used to data collection. The collected data was analyzed manually and then by using computer software (SPSS) program version.

Objectives: Assessment of nurse's knowledge and attitude regarding care of epileptic patient.

Result: the result of study showed that most of nurses (83%) were know the definition of epilepsy, (76%) they were know about causes of epilepsy, majority of nurses (80%) were know about management of epilepsy and more than half (67%) of nurses were know about complication of epilepsy. About nurses' attitude: The study showed that most of nurses had positive attitude regarding seizure precaution, nursing care during seizure and they had positive attitude regarding nursing concept about epilepsy except in attitude regarding to their allow people with epilepsy to drive, they have negative comment.

The study Recommended that: the Hospital director should perform training courses to the nurses and increase knowledge by using chart, object, media about emergency care of epileptic episode, rotation of all nurse to ICU to deal with emergency situation of epilepsy, the community authority must be establish courses and educational program to increase awareness about epilepsy type, risk sign and symptom and complication among communities, families and individuals.



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Chapter One

Introduction

Justification

Objectives

1.1 Introduction

Epilepsy is a group of syndromes characterized by recurring Seizures.⁽¹⁾ The majority of patients experiencing seizures in the ICU do not have preexisting epilepsy, and their chances of developing epilepsy in the future are usually more dependent on the cause than on the number or intensity of seizures that they experience. However, because of other deleterious neuronal and systemic effects of seizures, their rapid diagnosis and suppression during a period of critical illness is necessary.⁽²⁾

Epilepsy may be acquired or idiopathic (unknown cause). Causes of acquired epilepsy include traumatic brain injury and anoxic events. No cause has been identified for idiopathic epilepsy. The most common time for idiopathic epilepsy to begin is before age 20. New-onset seizures after this age are most commonly caused by an underlying neurological disorder.⁽³⁾ An electronic encephalogram is the most useful test for evaluating seizures. An EEG can determine where in the brain the seizures start, the Frequency and duration of seizures, and the presence of subclinical (asymptomatic) seizures. Sleep deprivation and flashing light stimulation may be used to evaluate the seizure threshold. For more information on electronic encephalogram.⁽⁴⁾

A person is diagnosed with epilepsy if they have one or more seizures that were not caused by some known and reversible medical condition like alcohol withdrawal or extremely low blood sugar. The seizures in epilepsy may be related to a brain injury or a family tendency, but often the cause is completely unknown. The word "epilepsy" does not indicate anything about the cause of the person's seizures or their severity.⁽⁵⁾

Many medications are available to control seizures, although the mechanisms of their actions are still unknown, the objective is to achieve seizure control with minimal side effects. Medication therapy controls rather than cures seizures. Treatment is usually started with a single medication. The starting dose and the rate at which the dosage is increased depend on the occurrence of side effects. The medication levels in the blood are monitored because the rate of

drug absorption varies among patients. Changing to another medication may be necessary. An estimated 2 to 4 million people in the United States have epilepsy (1 in 100 adults is affected), and onset occurs before the age of 20 years in greater than 75% of patients.⁽¹⁾

1.2 Justification

Epilepsy is a common chronic neurological disorder that affects people of all ages, race and social class worldwide ⁽¹²⁾.

According to world health organization around 50 million people worldwide have epilepsy with nearly 90% of the people with epilepsy found in developing regions this indicates that the disorder necessitates more attention in our milieu ⁽¹³⁾

Literature suggests that the access to a nurse specializing in the care of an epileptic patient may help improve the patients' understanding and management of their condition, and in doing so, may decrease morbidity and mortality rates. ⁽¹⁴⁾

1.3 Objectives

1.3.1 General objective:

To assess nurse's knowledge and attitude regarding care of epileptic patient.

1.3.2 Specific objective:

1. To assess nurses' knowledge about definition and causes of epilepsy.
2. To assess nurses' knowledge regarding sign and symptoms type of epilepsy.
3. To assess nurses knowledge regarding management and complication.
4. To determine nurse's attitude about care of epileptic patient.

Chapter Two

Literature Review

2. Literature review

In developed countries, mortality measured by the standardized mortality ratio is 2–3 times that of the general population. The important epilepsy-related deaths are sudden unexpected, unexplained death in epilepsy (2–18% of all deaths in epilepsy), death in status epilepticus (12.5%) and suicide (0–2%) In status epilepticus, the mortality depends on the cause and is higher in elderly symptomatic patients. Risk of suicide is greatest when epilepsy starts in adolescents with a history of associated psychiatric disturbance ⁽¹⁵⁾

Definition

Epilepsy is a group of syndromes characterized by recurring Seizures. Epileptic syndromes are classified by specific patterns of clinical features, including age of onset, family history, and seizure type (1), Epilepsy is a chronic neurological disorder characterized by recurrent seizure activity. seizure is defined as “sudden, abnormal, and excessive electrical discharges from the brain that can change motor or autonomic function, consciousness, or sensation. Seizures can develop at any time during a person’s life, and they can occur at any time. seizure may be a symptom of epilepsy ⁽³⁾

The normal stability of the neuron cell membrane is impaired in individuals with epilepsy. This instability allows for abnormal electrical discharges to occur. These discharges cause the characteristic symptoms seen during a seizure. Seizures can be classified as partial or generalized. Partial seizures begin on one side of the cerebral cortex. In some cases the electrical discharge spreads to the other hemisphere and the seizure becomes generalized. Generalized seizures are characterized by involvement of both cerebral hemispheres ⁽⁴⁾.

A disorder of the nervous system that can cause people to suddenly become unconscious and to have violent, uncontrolled movements of the body. ⁽⁶⁾

Epilepsy is a group of related disorders in the brain's electrical systems that are characterized by a tendency to cause recurrent seizures. Seizures cause changes in movement, behavior, sensation, or awareness, including loss of consciousness or convulsions, which last from a few seconds to a few minutes in most individuals. Seizures may occur in children and adults Epilepsy is not a form of mental illness or intellectual dysfunction. ⁽⁷⁾

Pathophysiology:

Messages from the body are carried by the neurons (nerve cells) of the brain by means of discharges of electrochemical energy that sweep along them. These impulses occur in bursts whenever a nerve cell has a task to perform. Sometimes, these cells or groups of cells continue firing after a task is finished. During the period of unwanted discharges, parts of the body controlled by the errant cells may perform erratically. Resultant dysfunction ranges from mild to incapacitating and often causes unconsciousness. When these uncontrolled, abnormal discharges occur repeatedly, a person is said to have an epileptic syndrome. Epilepsy is not associated with intellectual level. People with epilepsy without other brain or nervous system disabilities fall within the same intelligence ranges as the overall population. Epilepsy is not synonymous with mental retardation or illness. Many who are developmentally disabled because of serious neurologic damage, however, have epilepsy as well ⁽¹⁾.

The normal stability of the neuron cell membrane is impaired in individuals with epilepsy. This instability allows for abnormal electrical discharges to occur. These discharges cause the characteristic symptoms seen during a seizure. Seizures can be classified as partial or generalized. Partial seizures begin on one side of the cerebral cortex. In some cases, the electrical discharge spreads to the other hemisphere and the seizure becomes generalized. Generalized seizures are characterized by involvement of both cerebral hemispheres ⁽³⁾

The pathophysiology of epilepsy affects and can alter the electrical signals in the brain. Epilepsy is a condition where these electrical signals fire randomly,

causing seizures. It is typically treated with medication to control the seizures, and in rare cases, surgery. Seizures are the only symptom of the pathophysiology of epilepsy. Seizures can vary in severity and appearance because different parts of the brain are affected by the electrical signaling. Usually a person will have the same type of seizure each time, but the type of seizure can vary from person to person.

Partial seizures affect only a part of the brain, and can be simple or complex. Simple partial seizures can cause unusual stimuli, such as a strange taste or smell, or may affect a part of the body like the leg, making it jerk uncontrollably. Complex partial seizures cause a loss of consciousness, often accompanied by repetitive and purposeless movements such as walking in circles. Generalized seizures, on the other hand, affect the entire brain at once. An absence seizure happens when a person "zones out" for a short amount of time, becoming unresponsive and staring. Myoclonic seizures are characterized by muscle jerking in the limbs. Atonic seizures cause a loss of muscle tone, so that a person falls down. The most severe seizures are grand mal seizures, where a person loses consciousness and thrashes around, flailing his or her limbs. Often the pathophysiology of epilepsy has an unknown cause. Some types of epilepsy do run in families, suggesting a genetic vulnerability. Brain trauma caused by head injury, diseases like meningitis, or tumors can also cause seizures. Children who suffer prenatal trauma or have a developmental disorder such as Down's syndrome may also suffer from epilepsy. The pathophysiology of epilepsy tends to stay within the brain, not affecting the rest of the body. Complications from epilepsy tend to happen when people injure themselves during seizures. It is especially dangerous if a seizure occurs while driving or swimming, but even in a less demanding situation, a person could fall and hurt themselves during an episode.

Epilepsy can cause abnormalities in the electrical signals in the brain, so often doctors use an electroencephalogram to diagnose it. An electroencephalogram records the electrical signals in the brain. Magnetic

resonance imaging is another way to look into the brain, and this technique is useful for revealing brain injuries that may have caused seizures. ⁽⁸⁾

Etiology:

Epilepsy may be acquired or idiopathic. Causes of acquired epilepsy include traumatic brain injury and anoxic events. No cause has been identified for idiopathic epilepsy. The most common time for idiopathic epilepsy to begin is before age 20. New-onset seizures after this age are most commonly caused by an underlying neurological disorder. ⁽³⁾

Epilepsy may be acquired or idiopathic (unknown cause). Causes of acquired epilepsy include traumatic brain injury and anoxic events. No cause has been identified for idiopathic epilepsy. The most common time for idiopathic epilepsy to begin is before age 20. New-onset seizures after this age are most commonly caused by an underlying neurological disorder. ⁽⁴⁾

Factors influencing the development of posttraumatic epilepsy include an early posttraumatic seizure, depressed skull fracture, intracranial haematoma, dural penetration, focal neurological deficit and posttraumatic amnesia over 24 hours with the presence of a skull fracture or haematoma. Seizures in critically ill patients are most commonly due to drug effects; metabolic, infectious or toxic disorders; and intracranial mass lesions although they may be due to trauma or neoplasm. Conditions producing seizures tend either to increase neuronal excitation or to impair neuronal inhibition. A few generalised disorders (e.g. non-ketotic hyperglycaemia) may produce partial or focal seizures ⁽²⁾.

Common causes of epilepsy in adults include: brain tumors, hereditary factor, alcohol withdrawal, head injuries, drug abuse (cocaine), meningitis, malaria, eclampsia, low blood sugar just to name a few. ⁽¹²⁾

Type: Generalized Seizures:

Absence seizures (formerly called petit mal), Myoclonic seizures, Clonic seizures, tonic seizure, Tonic clonic seizures (formerly called grand mal), Atonic seizures (drop attacks).

Partial Seizures:

- Simple partial seizures (consciousness not impaired), with motor symptoms, with sensory symptoms, with autonomic symptoms and with psychic symptoms.
- Complex partial seizures (with impaired consciousness).
- Partial seizures evolving to secondarily generalized seizures simple partial secondarily generalized complex partial secondarily generalized simple partial evolving to complex partial.

Generalized seizures (*absence, atonic, tonic clonic, myoclonic*) involve both sides of the brain, while partial (*simple and complex*) seizures involve only a part of the brain.

Absence seizures (*formerly known as petit mal seizure*): These seizures usually last from 2 to 15 seconds and may occur just a few times a day, or more than 100 times in a single day. They usually present as bland staring, which one might mistake for daydreaming, physical automatisms, such as lip smacking, fumbling or picking at clothes, or twitching of facial or body muscles. Afterward, the person will likely have no memory of what happened while he or she had the seizure. A lot of people won't recognize absence seizures as seizures. They occur mostly among children, starting between the age of 4 and 12. They rarely begin after age 20. Most children with typical absence seizures are otherwise normal.

Generalized tonic clonic seizure (*formerly known as grand mal seizures; also known as convulsions or convulsive seizures*): When most people think of seizures or epilepsy, they're thinking of this type of seizure. When a person has a tonic clonic seizure, his or her arms and legs will first stiffen. This is the tonic stage. His or her limbs and head will then begin jerking, which is the clonic phase. Like all seizures.

Generalized Seizures these can vary, mostly with people experiencing either the tonic or clonic phase by itself. During the seizure, the person might bite their tongue or the inside of his or her mouth, experience incontinence, or even decrease or cease his or her breathing (in this case, his or her breathing

should return to normal during the tonic (jerking) portion of the seizure). Afterward, the person will likely be confused, not remember what happened, need to sleep for a while and might have a headache. Depending on the person, it can take them from minutes to hours to fully recover. For people with tonic clonic seizures, it is especially important to make sure that those who spend much time around them know correct seizure first aid.

Myoclonic seizures: These seizures cause parts of a person's body to jerk—for instance, his or her arm or leg might suddenly twitch. If you've ever had a foot twitch suddenly when you're asleep, that would be a lot like a myoclonic jerk (but it does NOT mean you have epilepsy. The jerking of feet while you're asleep are a type of nonepileptic behavior.) Someone who has myoclonic seizures might be thought of as clumsy. First aid is usually not required for myoclonic seizures, but if it is your first seizure of this type, you might want to visit a physician to determine what is causing it.

Atonic seizures (also known as drop attacks, or astatic or akinetic seizures): These seizures make a part, or all, of a person's body suddenly go limp. This means that the person's head might suddenly drop, or he or she could slump down or even totally collapse, dropping to the floor (thus the name drop attack). Because of the sudden and complete nature of these types of seizures, they can be dangerous to the person having one. ⁽⁹⁾

Clinical Manifestations:

Depending on the location of the discharging neurons, seizures may range from a simple staring episode to prolonged convulsive movements with loss of consciousness. Seizures have been classified according to the area of the brain involved and have been identified as partial, generalized, and unclassified. Partial seizures are focal in origin and affect only part of the brain. Generalized seizures are nonspecific in origin and affect the entire brain simultaneously. Unclassified seizures are so termed because of incomplete data. The initial pattern of the seizures indicates the region of the brain in which the seizure originates. In simple partial seizures, only a finger or hand may shake, or the

mouth may jerk uncontrollably. The person may talk unintelligibly, may be dizzy, and may experience unusual or unpleasant sights, sounds, odors, or tastes, but without loss of consciousness. In complex partial seizures, the person either remains motionless or moves automatically but inappropriately for time and place, or may experience excessive emotions of fear, anger, elation, or irritability. Whatever the manifestations, the person does ⁽¹⁾.

Symptoms of seizure activity correlate with the area of the brain where the seizure begins. Some patients experience an aura or sensation that warns the patient that a seizure is about to occur. An aura may be a visual distortion, a noxious odor, or an unusual sound. Patients who experience an aura may have enough time to sit or lie down before the seizure starts, thereby minimizing the chance of injury. Partial seizure Repetitive, purposeless behaviors, called automatisms, is the classic symptom of partial seizures. The patient appears to be in a dreamlike state while picking at his or her clothing, chewing, or smacking his or her lips. Patients may be labeled as mentally ill, particularly if automatisms include unacceptable social behaviors such as spitting or fondling themselves. Patients are not aware of their behavior or that it is inappropriate. If the patient does not lose consciousness, the seizure is labeled as simple partial and usually lasts less than 1 minute. Older terms for simple partial seizures include *jacksonian* and *focal motor*. If consciousness is lost, it is called a complex partial seizure or psychomotor seizure, and may last from 2 to 15 minutes. Partial seizures arising from the parietal lobe may cause paresthesias on the side of the body opposite the seizure focus. Visual disturbances are seen if the occipital lobe is the originating site. Involvement of the motor cortex results in involuntary movements of the opposite side of the body. Typically, movements begin in the arm and hand and may spread to the leg and face.

Generalized seizures affect the entire brain, Two types of generalized seizures are absence seizures and tonic-clonic seizures. Absence seizures, sometimes referred to as petit mal seizures, occur most often in children and are manifested by a period of staring that lasts several seconds. not remember the

episode when it is over. Generalized seizures, previously referred to as grand mal seizures, involve both hemispheres of the brain, causing both sides of the body to react. There may be intense rigidity of the entire body followed by alternating muscle relaxation and contraction (generalized tonic-clonic contraction). The simultaneous contractions of the diaphragm and chest muscles may produce a characteristic epileptic cry. The tongue is often chewed, and the patient is incontinent of urine and stool. After 1 or 2 minutes, the convulsive movements begin to subside; the patient relaxes and lies in deep coma, breathing noisily. The respirations at this point are chiefly abdominal. In the postictal state (after the seizure), the patient is often confused and hard to arouse and may sleep for hours. Many patients complain of headache, sore muscles, fatigue, and depression.

Tonic-clonic seizures are what most people envision when they think of seizures. They are sometimes called grand mal seizures or convulsions. Tonic-clonic seizures follow a typical progression. Aura and loss of consciousness may or may not occur. The tonic phase, lasting 30 to 60 seconds, is characterized by rigidity, causing the patient to fall if not lying down. The pupils are fixed and dilated, the hands and jaws are clenched, and the patient may temporarily stop breathing. The clonic phase is signaled by contraction and relaxation of all muscles in a jerky, rhythmic fashion. The extremities may move forcefully, causing injury if the patient strikes furniture or walls. The patient is often incontinent. Biting the lips or tongue may cause bleeding. The postictal period is the recovery period after a seizure. Following a partial seizure the postictal phase may be no more than a few minutes of disorientation.

Patients who experience a generalized seizure may sleep deeply for 30 minutes to several hours. Following this deep sleep, patients may complain of headache, confusion, and fatigue. Patients may realize that they had a seizure but not remember the event itself. ⁽³⁾

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The clonic phase is signaled by contraction and relaxation of all muscles in a jerky, rhythmic fashion.

The extremities may move forcefully, causing injury if the patient strikes furniture or walls. The patient is often incontinent, Biting the lips or tongue may cause bleeding. An oral airway can be used to prevent self-injury if the patient's mouth is open.

Never attempt to force an airway or anything else into the patient's mouth if the jaws are clenched. The postictal period is the recovery period after a seizure, following a partial seizure the postictal phase may be no more than a few minutes of disorientation. Patients who experience a generalized seizure may sleep deeply for 30 minutes to several hours. Following this deep sleep, patients may complain of headache, confusion, and fatigue. Patients may realize that they had a seizure but not remember the event itself. ⁽⁴⁾

Assessment and Diagnostic Findings:

The diagnostic assessment is aimed at determining the type of seizures, their frequency and severity, and the factors that precipitate them. A developmental history is taken, including events of pregnancy and childbirth, to seek evidence of preexisting injury.

The patient is also questioned about illnesses or head injuries that may have affected the brain. In addition to physical and neurologic evaluations, diagnostic examinations include biochemical, hematologic, and serologic studies. Magnetic resonance imaging is used to detect lesions in the brain, focal abnormalities, cerebrovascular abnormalities, and cerebral degenerative changes. The electroencephalogram furnishes diagnostic evidence in a substantial proportion of patients with epilepsy and aids in classifying the type of seizure. Abnormalities in the electroencephalogram usually continue between seizures or, if not apparent, may be elicited by hyperventilation or during sleep. Microelectrodes can be inserted deep in the brain to probe the action of single brain cells. Some people with seizures have normal electroencephalograms,

whereas others who have never had seizures have abnormal electroencephalograms.

Telemetry and computerized equipment are used to monitor electrical brain activity while patients pursue their normal activities and to store the readings on computer tapes for analysis. Video recording of seizures taken simultaneously with electroencephalogram telemetry is useful in determining the type of seizure as well as its duration and magnitude. This type of intensive monitoring is changing the treatment of severe epilepsy, Single photon emission computed tomography is an additional tool sometimes used in the diagnostic workup. It is useful for identifying the epileptogenic zone so that the area in the brain giving rise to seizures can be removed surgically ⁽¹⁾

An electroencephalogram is the most useful test for evaluating seizures. An electroencephalogram can determine where in the brain the seizures start, the frequency and duration of seizures, and the presence of subclinical (asymptomatic) seizures. Sleep deprivation and flashing light stimulation may be used to evaluate the seizure threshold. For more information on electroencephalogram. ⁽³⁾

An electroencephalogram is the most useful test for evaluating seizures. An electroencephalogram can determine where in the brain the seizures start, the frequency and duration of seizures, and the presence of subclinical (asymptomatic) seizures. Sleep deprivation and flashing light stimulation may be used to evaluate the seizure threshold ⁽⁴⁾

Medication:

Many medications are available to control seizures, although the mechanisms of their actions are still unknown, The objective is to achieve seizure control with minimal side effects. Medication therapy controls rather than cures seizures. Medications are selected on the basis of the type of seizure being treated and the effectiveness and safety of the medications If properly prescribed and taken, medications control seizures in 50% to 60% of patients with recurring seizures and provide partial control in another 15% to 35%. The

condition is not improved by any available medication in 20% and 35% of patients with generalized and partial epilepsy, respectively. Treatment is usually started with a single medication. The starting dose and the rate at which the dosage is increased depend on the occurrence of side effects. The medication levels in the blood are monitored because the rate of drug absorption varies among patients. Changing to another medication may be necessary if seizure control is not achieved or if toxicity makes it impossible to increase the dosage. The medication may need to be adjusted because of concurrent illness, weight changes, or increases in stress. Sudden withdrawal of these medications can cause seizures to occur with greater frequency or can precipitate the development of status epilepticus. Side effects of antiseizure agents may be divided into three groups: (a) idiosyncratic or allergic disorders, which present primarily as skin reactions; (b) acute toxicity, which may occur when the medication is initially prescribed; or (c) chronic toxicity, which occurs late in the course of therapy. The manifestations of drug toxicity are variable, and any organ system may be involved. Gingival hyperplasia (swollen and tender gums) can be associated with long-term use of phenytoin (Dilantin).⁽¹⁾

If an underlying cause for the seizure is identified, treatment focuses on correcting the cause. If no cause is found or if the seizures continue despite treatment of concurrent disorders, treatment focuses on the seizure activity. Numerous anticonvulsant medications are available, each with specific actions, therapeutic ranges, and potential side effects typically, the patient is started on one drug and the dosage is increased until therapeutic levels are attained or side effects become troublesome. If seizures are not controlled on a single drug, another medication is added. Many anticonvulsants require periodic blood tests to monitor serum levels as well as kidney and liver functions. Most of these medications can cause drowsiness, so teach the patient to avoid driving until the effects of the drug are known. Driving is also contraindicated until seizures are under control. If a patient must discontinue an anticonvulsant agent, it should be tapered slowly according to manufacturer directions. Stopping an anticonvulsant

abruptly can result in status epilepticus. If seizures continue despite anticonvulsant therapy, surgical intervention may be considered. Medication as (Phenytoin (Dilantin), Phenobarbital (Luminal), Carbamazepine (Tegretol), Valproic acid (Depakote), Gabapentin (Neurontin), Topiramate (Topamax))⁽³⁾.

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Surgical management:

Surgery is indicated for patients whose epilepsy results from intracranial tumors, abscess, cysts, or vascular anomalies. Some patients have intractable seizure disorders that do not respond to medication. There may be a focal atrophic process secondary to trauma, inflammation, stroke, or anoxia. If the seizures originate in a reasonably well-circumscribed area of the brain that can be excised without producing significant neurologic deficits, the removal of the area generating the seizures may produce long-term control and improvement. This type of neurosurgery has been aided by several advances, including microsurgical techniques, depth electroencephalograms, improved illumination and hemostasis, and the introduction of neuroleptanalgesic agents (droperidol and fentanyl). These techniques, combined with use of local anesthetic agents, enable the neurosurgeon to perform surgery on an alert and cooperative patient.

Using special testing devices, electrocortical mapping, and the patient's response to stimulation, the boundaries of the epileptogenic focus are determined. Any abnormal epileptogenic focus (ie, abnormal area of the brain)

is then removed.(1) The success of surgical intervention for epilepsy depends on identification of an epileptic focus within non vital brain tissue. The surgeon attempts to resect the area affected to prevent spread of seizure activity. In some cases, seizures may be cured, but in others, the goal is to reduce the frequency or severity of the seizures. If no focus is identified or if it is in a vital area such as the motor cortex or speech center, surgery is not feasibleThe preoperative assessment for epilepsy surgery is an extensive multistage process. Thorough assessment and teaching are essential. To adequately identify seizure foci, the patient is weaned off anticonvulsant therapy. Increasing the frequency of seizures with weaning is anxiety provoking to patients and significant others. ⁽³⁾

The success of surgical intervention for epilepsy depends on identification of an epileptic focus within no vital brain tissue. If no focus is identified or if it is in a vital area such as the motor cortex or speech center, surgery is not feasible. The surgeon attempts to resect the area affected to prevent spread of seizure activity. In some cases, seizures may be cured, but in others the goal is to reduce the frequency or severity of the seizures The preoperative assessment for epilepsy surgery is an extensive multistage process. Thorough assessment and teaching are essential. To adequately identify seizure foci, the patient is weaned off anticonvulsant therapy. Increasing the frequency of seizures is anxiety provoking to patients and significant others. ⁽⁴⁾

Emergency Care:

The prime objective in caring for a patient experiencing a seizure is to prevent injury. Side rails, if used, should be padded to prevent injury if the patient strikes his or her extremities against them. If the patient falls to the floor, move furniture out of the way. Maintain a patent airway and, if possible, turn the patient on his or her side to prevent aspiration if vomiting occurs. Do not force an airway or anything else into the patient's mouth once the seizure has begun. The individual should not be restrained because this may also increase the risk of injury. Observe and document the patient's behavior during the seizure,

which part of the body was first involved, progression of the seizure, and the length of time the seizure lasted.

After the seizure, assess the patient for breathing. Suction if necessary and initiate rescue breathing or cardiopulmonary resuscitation as indicated. ⁽³⁾

The prime objective in caring for a patient experiencing a seizure is to prevent injury. Side rails should be padded to prevent injury if the patient strikes his or her extremities against them. If the patient falls to the floor, move furniture out of the way. A small pillow should be placed under the patient's head to prevent striking it on the floor, taking care that the airway does not become occluded. If possible, turn the patient on his or her side to prevent aspiration if vomiting occurs. An oral airway and suction should be readily available. Do not force an airway in once the seizure has begun. The individual should not be restrained, because this may increase the risk of injury. Observe and document eye deviation, incontinence, which part of the body was first involved, and progression of the seizure. ⁽⁴⁾

Complications:

Having a seizure at certain times can lead to circumstances that are dangerous to yourself or others.

Falling. If you fall during a seizure, you can injure your head or break a bone. Drowning. If you have epilepsy, you're 15 to 19 times more likely to drown while swimming or bathing than the rest of the population because of the possibility of having a seizure while in the water.

Car accidents. A seizure that causes either loss of awareness or control can be dangerous if you're driving a car or operating other equipment. Many states have driver's license restrictions related to your ability to control seizures and impose a minimum amount of time that you've been seizure-free, ranging from months to years, before you're allowed to drive.

Pregnancy complications. Seizures during pregnancy pose dangers to both mother and baby, and certain anti-epileptic medications increase the risk of birth defects. If you have epilepsy and you're considering becoming pregnant, talk to

your doctor as you plan your pregnancy. Most women with epilepsy can become pregnant and have a healthy baby. You'll need to be carefully monitored throughout pregnancy, and medications may need to be adjusted. It's very important that you work with your doctor to plan your pregnancy.

Emotional health issues. People with epilepsy are more likely to have psychological problems, especially depression, anxiety and, in extreme cases, suicide. Problems may be a result of difficulties dealing with the condition itself as well as medication side effects.

Other life-threatening complications of epilepsy are uncommon, but may happen, such as: Status epilepticus. This condition occurs if you're in a state of continuous seizure activity lasting more than five minutes, or if you have frequent recurrent seizures without regaining full consciousness in between them. People with status epilepticus have an increased risk of permanent brain damage and death.

Sudden unexplained death in epilepsy. People with epilepsy also have a small risk of sudden unexplained death. The cause is unknown, but some research shows it may occur due to heart or respiratory conditions.⁽¹⁰⁾

Complications of complex partial seizures are easily triggered by emotional stress. The limbic structures of the brain may be damaged by seizure activity. The limbic system is concerned with emotion and motivation. These patients may develop cognitive and behavioral difficulties, such as the following:

Interictal personality: humorlessness, dependence, obsessions, anger, hypo- or hypersexuality, emotionality .Memory loss: short-term memory loss attributable to dysfunction in the hippocampus, anomia (inability to recall words or names of objects) ,Poriomania: prolonged aimless wandering followed by amnesia, Violent behavior: aggression and defensiveness when subjected to restraint during a seizure complications associated with tonic-clonic seizures may involve injury, such as the following: Aspiration (inhalation into the lungs) of secretions or vomited stomach contents, Skull or vertebral fractures, shoulder

dislocation, Tongue, lip, or cheek injuries caused by biting, Status epilepticus is a medical emergency in which seizures recur without the patient regaining consciousness between events. This condition can develop in any type of seizure but is most common in tonic-clonic seizures. Status epilepticus may cause brain damage or cognitive dysfunction and may be fatal. Subsequent seizures become briefer, more localized, and may be reduced to myoclonic activity. Complications may include: Aspiration, Cardiac arrhythmias, Dehydration, Fractures, Myocardial infarction (heart attack) ,Oral and head trauma and Pulmonary edema (fluid build-up in the lungs).

Sudden unexplained death in epilepsy occurs in a small percentage of persons with epilepsy. For reasons that are poorly understood, an otherwise healthy person with epilepsy can die suddenly. While this also happens within the general population, persons with symptomatic epilepsy have a much greater risk.

Autopsies have not uncovered a physical cause of Sudden unexplained death in epilepsy. It is possible that pulmonary edema (fluid build-up in the lungs), suffocation, or cardiac arrhythmias (irregular heartbeat) may be responsible. Some people appear to be at a higher risk than others, such as young adults with generalized tonic-clonic seizures that are not fully controlled with medication and those who abuse alcohol and illicit drugs. Patients using two or more anticonvulsants may be at increased risk for Sudden unexplained death in epilepsy. ⁽¹¹⁾

Chapter Three

Methodology

3 Methodology

3.1 Study approach:

The approach of this study is quantitative.

3.2 Study design:

This descriptive cross sectional study done in Almak Nimer university hospital during period from (August to November 2016) to assess nurses knowledge and practice about intravenous medication administration.

3.3 Study area:

The research was done in Sudan in Shendi, Shendi locality is one of the localities of the River Nile State. It is bounded by Khartoum state to the south, Elddamer locality to the north, River Nile to the west and Gadarif state to the east. The total area of the locality is about 14596 Km². Geographically it lies between line 36 east to 31 west longitudinal and line 19 north to line 15 south latitudinal in the arid zone of Sudan with an annual rainfall ranging' between 0 and 119ml per year. It is situated on the main River Nile, which provides the water for the agricultural land. The main plants are cash crops such as white beans, onions, wheat and sorghum, goats and camels are practiced both by the few nomadic 'Rashaida' and the settled farmers.

Culturally the population of Shendi is a mixture of the various cultures that occur in Sudan though the Northern tribes, particularly Elgaalien, are predominant. Shendi has three hospital, Shendi teaching hospital, military hospital and Almak Nimer hospital

3.4 Study setting:

Almak Nimer hospital is established in July 2002, it is biggest hospital which have different department and provide good health service for population Shendi area, there is medicine department, surgery, pediatric, obstetrical, ENT, ophthalmic, which compose of two ward male and female with at least 40 beds, thirteen nurses are working in this unit. There are also major and minor theater, emergency room and CCU, ICU, and dialysis room. Emergency room,

oncology, and dialysis unit, there is also blood bank and pharmacy and laboratory. The hospitals have more than 200beds, and the nursing staff rotated among the units routinely, they were about 125nurse.

3.5 Study population:

All nurses who work in Almak Nimer university hospital with creating of educational levels or period of work.

▪ Inclusion criteria:

The Inclusion criteria were nurses working in the wards regardless of status or shift these wards include medical, surgical, obstetrics and gynecology, pediatric, coronary care unit (CCU)and intensive care units (ICUs).

▪ Exclusion criteria:

The exclusion criteria were nurses who working in outpatient care clinics who works in national service and nurses on annual or maternity leave during the study period.

3.6 Sampling and sample size:

All nurses were enrolled. 100 nurses work during all shift were participated in the study

3.7. Data collection tools:

One tool was used. Standard closed ended questioner was been developed by researcher; composed from two section.

➤ Section one about knowledge assessment

Part one: demographic data (age, education level, years of experience)

Part two: regarding epilepsy knowledge

Section two about nurses' attitude regarding epilepsy.

3.8. Data collection technique:

The data was collected during two weeks during three shift, the respondent filled questioner by him / her self, no one refuse to participate and there was no missing.

3.9 Statistical Design:

The collected data were organized, categorized and tabulated in tables using frequency and percentage. The statistical package for social sciences (SPSS) was used for statistical analysis.

3.10 Ethical considerations:

The Research was approved from scientific committee board research. The original director of the hospital and administer staff permit to conduct study. Purpose of study was explain verbally to each participate and they were accept to participate, they have chance to continue or stop any time they wish.

Chapter Four

Results

Results

Table (1): Distribution of nurses according to demographic characteristic.

Level education	Percent	Frequency
Diploma	4%	4
Bachelor	79%	79
Master	17%	17
Age	Percent	Frequency
20-30 years	86%	86
31-40 years	14%	14
Over 41 years	0	0
years of experience	Percent	Frequency
Less than 2 years	26%	26
2-5 years	56%	56
More	18%	18
Total	100%	100

Above table showed that (4%) of nurses were Diploma, (79%) were bachelor, (17) were master, (86%) their age between (20-30 years), and (14%) their age between (31-40 years). While (26%) their experience Less than 2 years, (56%) from 2-5 years and (18%) more than 5 years.

Table (2): Distribution of nurses according to their knowledge regarding definition of epilepsy:

Nurses knowledge	Correct answer		Incorrect answer	
	F	P	F	Pt
Epilepsy is a group of syndromes characterized by recurring Seizures (true)	81	81%	19	19%
Epilepsy is always caused by brain damage (false)	83	83%	17	17%
An epilepsy seizure seizure can be described as an abnormality in the function of nerve cells in the brain (true)	81	81%	19	19%
Epilepsy is not infectious (true)	92	92%	8	8%
Epilepsy is symptom of mental illness (false)	76	76%	14	14%
All seizure affect to side of brain (false)	83	83%	17	17%
Mean		83 ± 2		17± 2

Above table show that (83± 2) of nurses were Correct answer about definition of epilepsy and (17± 2) their incorrect answer about definition of epilepsy

F=frequency

P=percentage

Table (3): Distribution of nurses according to their knowledge regarding sign and symptoms of epilepsy:

Nurses knowledge	Correct answer		Incorrect answer	
	F	P	F	P
All patient with epilepsy have similar symptoms (false)	80	80%	20	20%
Some seizure may last for last for a matter of seconds and not be noticed by others (true)	75	75%	25	25%
All people with epilepsy loss consciousness during seizure (false)	64	64%	36	36%
Some people. (true)	84	84%	16	16%
Mean		76± 2		24± 2

Above table show (76) of nurses were Correct answer about sign and symptoms of epilepsy and (24) were Incorrect answer about sign and symptoms of epilepsy.

F=frequency

P=percentage

Table (4): Distribution of nurses according to their knowledge regarding epilepsy investigation:

Nurses knowledge	Correct answer		Incorrect answer	
	F	P	F	P
An EEG Can be used to help diagnose epilepsy (true)	69	69%	31	31%
IF an EEG is abnormal, this is a definite sign of epilepsy (false)	68	68%	32	32%
An EEG is designed to detect electrical activity from the brain (true)	91	91%	9	9%
A normal EEG means that you do not have epilepsy (false)	95	95%	5	5%
Mean		81± 2		19± 2

Above table show that (81) of nurses had correct answer about investigation and (19) of nurses were Incorrect answer about investigation

F=frequency

P=percentage

Table (5): Distribution of nurses according to their knowledge regarding epilepsy causes:

Nurses knowledge	Correct answer		incorrect answer	
	F	P	F	p
An epileptic seizure can be described as a temporary lack of oxygen to the brain (false)	51	51%	49	49%
Too much alcohol may make seizures more likely, alcohol withdrawal, head injuries, drug abuse (true)	97	97%	3	3%
Certain forms of brain damage always cause epilepsy (false)	67	67%	33	33%
Causes of acquired epilepsy include traumatic brain injury and anoxic events. (true)	90	90	10	10%
Mean		76± 2		24± 2

Above table show that (76) of nurses were correct answer about causes of epilepsy and (19) were incorrect answer about causes of epilepsy.

F= Frequency

P= percentage

Table (6): Distribution of nurse's according to their knowledge regarding types of epilepsy:

Nurses knowledge	Correct answer		Incorrect answer	
	F	P	F	P
General type of seizure are: Absence seizures (formerly called petit mal), myoclonic seizures clonic seizures, tonic seizures, Tonic clonic seizures (formerly called grand mal) and Atonic seizures (true)	79	79.0%	21	21.0%
Partial seizure 3 type are : Simple partial seizures, Complex partial seizures and Partial seizures evolving to secondarily generalized seizures (true)	88	88.0%	12	12.0%
mean		83± 2		17± 2

Above table show that (83) of nurses had correct answer about types of epilepsy and (17) of nurses were incorrect answer about types of epilepsy.

F=frequency.

P=percentage.

Table (7): Distribution of nurses according to their knowledge regarding epilepsy management:

Nurses knowledge	Correct answer		In correct answer	
	F	P	F	P
All patient whose start drugs for their epilepsy have to take them for life (false)	62	62%	38	38%
Increasing the dose of antiepileptic drugs increases the chances of side effects (true)	87	87%	23	23%
Most anticonvulsants require periodic blood tests to monitor serum levels and kidney and liver function (true)	91	91%	9	9%
People taking a combination of antiepileptic drugs are more likely to have side effects than are those taking only one (true)	94	94%	6	6%
It is always helpful patient to take extra doses of antiepileptic drugs when not feeling well (false)	86	86%	14	14%
If seizure stop with antiepileptic drugs, this means Patient with epilepsy has been cured (false)	91	91%	9	9%
There is no need to continue taking antiepileptic drugs if pt seizures stop (false)	49	49%	59	59%
Brain surgery is still used as a method of management seizures (true)	81	81%	19	19%
Mean		80± 2		20± 2

Above table show that (80%) of nurses had correct answer about management of epilepsy and (20%) of nurses were incorrect answer about management of epilepsy

F=frequency.

P=percentage.

Table (8): Distribution of nurses according to their knowledge regarding complication of epilepsy:

Nurses knowledge	Correct answer		Incorrect answer	
	F	P	F	P
Life threatening complication are most common status epileptics and sudden unexplained death in epilepsy (SUDEP) (false)	39	39%	61	61%
Emotional health issue, falling, injure are complication of epilepsy (true)	95	95%	5	5%
Mean		67± 2		33± 2

Above table show that (67) of nurses had correct answer about complication of epilepsy and (33) of nurses had incorrect answer about complication of epilepsy.

F=frequency.

P=percentage.

Table (9) Distribution of nurses according to their attitude regarding seizure precautions.

Attitude of nurse	Strongly agree	Agree	Neither	Disagree	Strong Disagree
Medical history and physical examinations cannot identify all patients with epilepsy	37.0%	34.0%	6.0%	11.0%	12.0%
Seizure precautions pad side rails of hospital bed	56.0%	33.0%	6.0%	4.0%	1.0%
Keep call light within reach.	41.0%	50.0%	5.0%	2.0%	2.0%
Assist patient when ambulating. Keep suction and oral airway at bedside	72.0%	23.0%	3.0%	1.0%	1.0%

The above table showed that the nurses had positive attitude (37%) were strongly agree about medical history and examination cannot identify all patients with epilepsy, and (34%) were agree, Also (56%) had strongly agree about Pad side rails of hospital bed, and (33%) were agree, withal(41)were strong agree about keep call light within reach and (50%)were agree while (72%) had strongly agree about assist patient when ambulating, keep suction and oral air way at bed side, and (23%) were agree

Table (10): Distribution of nurses according to their attitude regarding nursing care during seizure.

Attitude of nurse	Strongly agree	Agree	Neither	Disagree	Strong Disagree
Nursing Care During a Seizure Stay with patient and Do not restrain patient.	60.0%	29.0%	6.0%	3.0%	2.0%
Protect form injury	73.0%	17.0%	3.0%	6.0%	1.0%
Turn to side when able to prevent occlusion of airway or aspiration and Suction if needed	60.0%	34.0%	3.0%	1.0%	2.0%
Monitor vital signs when able. Be prepared to assist with breathing if necessary	57.0%	35.0%	6.0%	1.0%	1.0%
Loosen tight clothing., Observe and document progression	54.0%	33.0%	8.0%	2.0%	3.0%
As a nurse I have an ethical responsibility to treat patients with epilepsy	51.0%	30.0%	8.0%	7.0%	4.0%

Above table showed that (60%) of nurses had strongly agree, (29%) were agree about Stay with patient and do not restrain patient, about protection of patient the nurses had positive attitude (73%) were strong agree and (17%) were agree, the nurses had positive attitude regarding Turn patient to side when able to prevent occlusion of airway or aspiration and suction if needed(60%) were strongly agree and (34%) were agree, the nurses had positive attitude regarding Monitor vital signs and assist patient breathing if necessary (57%) were strongly agree and (35%) were agree, whether the nurses had positive attitude regarding loosen tight clothing. Observe and document progression of patient (54%) were strongly agree and (33%) were agree, also there had positive attitude about ethical responsibility to treat patients (51%) were strongly agree and (30%) were agree

Table (11) Distribution of nurses according to their attitude regarding nursing concept.

Attitude of nurse	Strongly agree	Agree	Neither	Disagree	Strongly disagree
Nursing Concept					
People with epilepsy Are to allowed drive	23.05	17.0%	4.0%	26.0%	30.0%
People with epilepsy Would receive better treatment in hospitals	36.0%	35.0%	12.0%	11.0%	6.0%
People with epilepsy Have poor cognitive capacity (learning and memory)	22.0%	36.0%	13.0%	21.0%	8.0%
Patient with epilepsy need health teaching regarding precaution of seizure	62.0%	29.0%	5.0%	1.0%	3.0%
People with epilepsy have a restricted range of physical activities and Can participate in sport activities with restrictions	27.0%	46.0%	9.0%	16.0%	2.0%
Have a greater risk of developing mental disorders	24.0%	44.0%	11.0%	13.0%	8.0%

Above table showed that the nurses had negative attitude regarding their allow people with epilepsy to drive (30%) were strongly disagree and(26%) were disagree. they had positive attitude about People with epilepsy Would receive better treatment in hospitals (36%)were strongly agree and (35%) were agree .they had positive attitude about People with epilepsy have poor cognitive capacity (learning and memory) (36%) were agree and (22%) were strongly agree; in addition to they had positive attitude regarding health teaching for patient with epilepsy (62%) were strongly agree and (29%) were agree; while they had positive attitude about People with epilepsy have a restricted range of physical activities and Can participate in sport activities with restrictions (46%) were agree and (26%) were strongly agree, they had positive attitude about people with epilepsy Had a greater risk of developing mental disorders (44%) were agree and (24%) were strongly disagree.

Chapter Five

Discussion

Conclusion

Recommendations

5.1 Discussion

Epilepsy is a common chronic neurological disorder that affects people of all ages, race and social class worldwide ⁽¹²⁾.

The study showed that, majority of nurses (79%) their level of education bachelor degree, and their age range between (20-30 years) and more than half (56%) their years of experience from (2-5 years). Furthermore, The study clarify most of nurses (83%) were knowledgeable about definition of epilepsy, and (76%) of nurses were knowledgeable about sign and symptoms of epilepsy, in addition to that, majority of nurses (81%) were knowledgeable about epilepsy investigation, most of nurses (76%) knowledgeable about causes of epilepsy, these findings indicated that nurses were have good background knowledge about epilepsy which may aid them to identify, treat, and care f their patient in correct way, and minimize the complication.

Also most of nurses (83%) were knowledgeable about types of epilepsy and this agree with "Generalized Seizures are Absence seizures (formerly called petit mal), Myoclonic seizures, Clonic seizures, tonic seizure, Tonic clonic seizures (formerly called grand mal), Atonics seizures (drop attacks). Partial Seizures are, Simple partial seizures, Complex partial seizures (with impaired consciousness) and Partial seizures evolving to secondarily generalized seizures". ⁽⁹⁾

The Study showed that majority of nurses (80%) were knowledgeable about management of epilepsy and more than half (67%) of nurses were knowledgeable about complication of epilepsy and this agree with "Falling, Car accidents. seizure that causes either loss of awareness or control, Emotional health issues. People with epilepsy are more likely to have psychological problems, especially depression, anxiety and, in extreme cases, suicide. Problems may be a result of difficulties dealing with the condition itself as well as medication side effects.

Other life-threatening complications of epilepsy are uncommon, but may happen, such as: Status epilepticus. This condition occurs if patient in a state of

continuous seizure activity lasting more than five minutes, or if you have frequent recurrent seizures without regaining full consciousness in between them. People with status epilepticus have an increased risk of permanent brain damage and death.

Sudden unexplained death in epilepsy (SUDEP). People with epilepsy also have a small risk of sudden unexplained death. The cause is unknown, but some research shows it may occur due to heart or respiratory conditions".⁽¹⁰⁾

About nurses' attitude: The study showed that most of nurses had positive attitude regarding seizure precaution, nursing care during seizure and they had positive attitude regarding nursing concept about epilepsy except in attitude regarding their allow to people with epilepsy to drive they have negative comment .

5.2 Conclusion

Based on the finding present study, it was concluded that:

The study clarify most of nurses were knowledgeable about definition of epilepsy, were knowledgeable about sign and symptoms of epilepsy, majority of nurses were knowledgeable about epilepsy investigation and causes Also were knowledgeable about types of epilepsy, management of epilepsy and more than half of nurses were knowledgeable about complication.

About nurses' attitude: The study showed that most of nurses had positive attitude regarding seizure precaution, nursing care during seizure and they had positive attitude regarding nursing concept about epilepsy except in attitude regarding to their allow people with epilepsy to drive they have negative comment.

5.3 Recommendations

- 1- The Hospital director should perform training courses to the nurses and increase knowledge by using chart, object and media about emergency care of epileptic episode.
- 2-Rotation of all nurses to intensive care unit to deal with emergency situation of epilepsy.
- 3- The community authority must be establish courses and educational program to increase awareness about epilepsy type, risk sign and symptom and complication among communities, families and individuals.

Appendix

References

Questionnaire

References

- 1-Suzzanec.smeltzer/BrendeGabbier.Brunner and suddater's Text book of medical surgical nursing,12TH edition . 2011. williams and wikins, Page (1876-1880)
- 2-Doug Elliott,Leanne Aitken and Wendy Chaboyer ,ACCNS,CRITICAL CARE NURSING,2nd edition. 2012 Elsevier Australia, page(466)
- 3-linda s. Williams, rnbcpaula ,hopper, understanding medical surgical nursing ,3rd edition, USA. 2007, page(1067-1068)
- 4-LINDA S. WILLIAMS, UNDERSTANDING Medical Surgical Nursing, 2nd edition. United States of America, 2003, page (843-844)
- 5-[www.epilepsy.com /learn /epilepsy /101/what epilepsy .com](http://www.epilepsy.com/learn/epilepsy/101/what-epilepsy.com) .25-9-2016 11:57am
- 6-[WWW.merriam- Webster /dictionary / epilepsy –Merriam Webster-](http://www.merriam-webster.com/dictionary/epilepsy) 28-9-2016 1:39pm
- 7-[www.medicine.net .com -home midterms medical dictionary azlist – medicine net -](http://www.medicine.net.com/home/midterms/medical-dictionary-azlist) 28-9-2016 1:53p
- 8-[www.wisgeek health .com /what is the pathophysiology of epilepsy .htm](http://www.wisgeekhealth.com/what-is-the-pathophysiology-of-epilepsy.htm) 10-10-2016 12:58pm
- 9-[www.epilepsy foundation. Org. Epilepsy foundation](http://www.epilepsyfoundation.org) 10-10-2016 1:12pm
- 10- www.mayoclinic.org/diseases-conditions/epilepsy/.../dxc-20117207 26-10-2016 12:49pm
- 11 - [www.healthcommunities.com/epilepsyseizures/complications..shtml](http://www.healthcommunities.com/epilepsyseizures/complications.shtml) 26-10-2016 1:40pm
- 12-atanga, ngouakam, , wona,. management of epilepsy: knowledge and practises of nurses in buea regional hospital, south-west region of cameroonasian journal of social sciences & humanities vol. 3(2) may 2014
- 13- World Health Organization. The global campaign against epilepsy—out of the shadows. Geneva 2007.

14- Ghaydaa . shehata1, zienab abd el-latee, hala . ghanem2, marrwa . el-masry2
knowledge, attitude and practice regarding people with epilepsy among nurses
aktualn neurol 2015, page (193)

15-[www.who.int /fact sheets /e13-12-2016](http://www.who.int/fact_sheets/e13-12-2016) 11:00pm.

Shendi university

Faculty of post graduate studies and scientific research

Medical Surgical Nursing

Questionnaire to Assessment of nurses knowledge and attitude regarding care of epileptic patient in Elmak Nimer university hospital 2016

1- Level of education:

a- diploma () b- bacalora () c- master ()

2-age:

a- 20---30yaers () b-31----40 years () c-above41years ()

3-years of experience:

a-less than 2 years () b- 2-5 years() c -more than 5 years()

Statement	True	False
1- Epilepsy is a group of syndromes characterized by recurring Seizures		
2- Epilepsy is always caused by brain damage		
3-An epileptic seizure can be described as an abnormality in the function of nerve cells in the brain		
4-Causes of acquired epilepsy include traumatic brain injury and anoxic events		
5-Epilepsy is not infectious		
6- Epilepsy is a symptom of mental illness		
7- All patient with epilepsy have similar symptoms		
8-Too much alcohol may make seizures more likely , alcohol withdrawal, head injuries, drug abuse		
9- An EEG can be used to help diagnose epilepsy		
10-. If an EEG is abnormal, this is a definite sign of epilepsy		
11-An EEG is designed to detect electrical activity from the brain		

12- A normal EEG means that patient didn't have epilepsy		
13-An epileptic seizure can be described as a temporary lack of oxygen to the brain		
14- Some seizures may last for a matter of seconds and not be noticed by others		
15- All seizures affect both sides of the brain		
16- Certain forms of brain damage always cause epilepsy		
17-All people with epilepsy loss consciousness during seizure		
18-Some people get a warning or feeling shortly before a seizure		
19-general type of seizure are: Absence seizures (formerly called petit mal) ,myoclonic seizures Clonic seizures , tonic seizures, Tonic clonic seizures (formerly called grand mal) and Atonic seizures		
20-Partial Seizures 2 type are: Simple partial seizures, Complex partial seizures and Partial seizures evolving to secondarily generalized seizures		
21-All patient whose start drugs for their epilepsy have to take them for life		
22- Increasing the dose of antiepileptic drugs increases the chances of side effects		
23- Most anticonvulsants require periodic blood tests to monitor serum levels and kidney and liver function		
24- People taking a combination of antiepileptic drugs are more likely to have side effects than are those taking only one		
25-It is always helpful patient to take extra doses of antiepileptic drugs when not feeling well		
26- If seizures stop with antiepileptic drugs, this means Patient with epilepsy has been cured		
27-There is no need to continue taking antiepileptic drugs if pt		

seizures stop		
28--Brain surgery is still used as a method of management seizures		
29-life threatening complication are most common status epileptics and sudden unexplained death in epilepsy(SUDEP)		
30-Emotional health issue ,falling, injure are complication of epilepsy		

Assessment of nurse's attitude regarding epilepsy

Attitude of nurse	<i>strongly agree</i>	Agree	Neither	Disagree	Strong disagree
Medical history and physical examinations cannot identify all patients with epilepsy					
<i>Seizure Precautions</i> Pad side rails of hospital bed					
Keep call light within reach.					
Assist patient when ambulating. Keep suction and oral airway at bedside					
<i>Nursing Care During a Seizure</i> Stay with patient and Do not restrain patient.					
Protect from injury (move nearby objects)					
Turn to side when able to prevent occlusion of airway or aspiration and Suction if needed					
Monitor vital signs when able. Be prepared to assist with breathing if necessary					
Loosen tight clothing. Observe and document progression					
As a nurse I have an ethical responsibility to treat patients with epilepsy					
Nursing concept: People with epilepsy Are to allowed drive					

People with epilepsy Would receive better treatment in hospitals					
People with epilepsy Have poor cognitive capacity (learning and memory).					
Patient with epilepsy need health teaching regarding precaution of seizure					
People with epilepsy have a restricted range of physical activities and Can participate in sport activities with restrictions					
Have a greater risk of developing mental disorders					