Epidemiological Analysis: Chronic Health Problem

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**Introduction**

Chronic health problems have been on rising daily. Epilepsy is one of the common chronic health issues that has been in experience globally. This health problem is known to be a mind syndrome described by a persistent tendency generating epileptic seizures. The main sign of this condition is that the seizure results in a quick change in the normal functioning of an individual’s mind (Zack & Kobau, 2017). A different definition of epilepsy has been in deliberation by various bodies. Center for Disease Control and Prevention terms epilepsy to be the variations of a usual mind utility. The institution names brain growth, brain damage, severe head harm, central nervous structure problems, and stroke to be the chief activators of the existence of the condition.

The chronic condition of seizure influences the community healthiness responsiveness through civic awareness, advancement in the treatment, and the rights of vulnerable persons and disabled individuals. It is a result of the continual wellbeing and socioeconomic inconsistencies the affected persons go through. Hence, these problems affect all groups of people disregarding the age bracket (Buckley & Holmes, 2016). The extent varies in percentage on a slight note. It maximizes the threats of multiple psychosocial problems. The problem comprises of the low performance in academic, emotional trials, as well as hard in socialization (Friedman, Spruill, Liu, Tatsuoka, Stoll, Jobst & Sajatovic, 2018). In the United States, new cases of epilepsy lie at approximately 180,000 annually across all ages and gender. Upon treatment and excellent patient care, 80% of patients are likely to heal from the problem. Deaths may also be if the condition becomes mild (Friedman, Spruill, Liu, Tatsuoka, Stoll, Jobst & Sajatovic, 2018). This study deliberates on epilepsy as a chronic health syndrome. It will cover a background study, significance, study methodology, an analysis of epidemiology, screening, and finding, and a plan that focuses on the healthiness condition.

**Background Information and Significance**

Epilepsy is one of the health conditions that have confused many people to comprehend it. Terming a person as epileptic considers some aspects of the measure. Commonly, an individual would have epilepsy when they experience two or more senseless epileptic attacks taking place within a day (Miller, Coffield, Leroy & Wallin, 2016). The neurological examination would assist in identifying abnormalities in cognizance, conduct, actions, and state of mind. Epilepsy signs vary from minor to severe, depending on the variety of seizure being in witness. Mostly, meningeal frustration, an increase in intracranial stress, as well as brainy edema results in initial seizure conditions. While on the other hand, late seizures are in linkage with hypernatremia, infarction, and hydrocephalus. Common signs of seizure comprise of absolute stares, impermanent confusion, awareness loss, awkward rough actions, and emotional changes (Hogan, 2019).

In various forms of seizure actions, they may accompany some undesirable threats (Falco-Walter, Scheffer & Fisher, 2018). An increase of suicidal jeopardize may rise from the epilepsy onset. The rating of the suicidal threats in epilepsy is fourteen times in comparison to that of total inhabitants. Stroke is among the causes of epilepsy among older individuals. Lower-age and back individuals are most likely to be at higher jeopardized in emerging seizures (Friedman, Spruill, Liu, Tatsuoka, Stoll, Jobst & Sajatovic, 2018).

Classification of seizure comprises of comprehensive, focal, or consisting indefinite onset. Significant seizures seem to compost every part of the mind. While on the other hand, rare electrical action in a mind’s singular part that may transpire incorporating or less harm of cognizance, results in focal seizure(Falco-Walter, Scheffer & Fisher, 2018). As a result of chromosomal alteration, a non-triggered seizure might possess unfamiliar etiology. Hence, acute illness like trauma, poisonous ingestion, and hypoglycemia may result from an aggravated seizure. In 2015, 6.1% of the population in the United States dominated the lively epileptic condition. The table below compares the incidence rates with one of Texas (Armstrong, Grant, Gilbert, Lee & Norden, 2016). Individuals of 16 years and above still lead in the lively epileptic condition.

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| --- | --- | --- |
| Age Bracket | United States Population | Texas |
| 0-15 years | 420000 | 23000 |
| 16 years & Above | 3.4 million | 210000 |

Table 01- Incidence of active epilepsy, 2016.

Seizures are frequent among weak and helpless communities in society. The inhabitants in these families tend to have smaller earnings, lack employment, or have marriage issues like divorce or have lost their partners through death (Hogan, 2019). In society, individuals with seizure conditions are always impacted negatively in their social and economic lives. This state exposes them to difficulties to carefulness and treatment resulting from their wellness condition.

**Surveillance and Reporting**

Diverse health organizations have supported the research work through the issuance of a comprehensive research guide to scholars and researchers (Guthrie, Bienkowska-Gibbs, Manville, Pollitt, Kirtley & Wooding, 2015). Study methodologies are refined to influence the understanding of the health conditions amid diverse inhabitants. It also values the usefulness of intermediation in worth life improvement of the patients. The data that is obtainable in the research influence the mediation, with nursing the inpatient pool of the sick in the hospitals (Guthrie, Bienkowska-Gibbs, Manville, Pollitt, Kirtley & Wooding, 2015).

A state-centered scrutiny organism is in a proposal to collect data upon personal threat, conducts as well as precautionary wellbeing actions in the evaluation of the primary roots of sickness and deaths. BRFSS is one of the modern tools of research in health-based studies. It is in use in accruing raw information on prolonged wellbeing disorders as well as the healthiness conduct as the source of observing health developments (Iachan, Pierannunzi, Healey, Greenlund & Town, 2016).The data collected would be applicable as a reference in planning and making improvements in the society healthiness mediations. It would also influence the achievement of health goals and intentions. The questions in the survey would generate information on the diagnosis of epilepsy by a specialist. It would also determine how often seizures happen within a given seizure type, and even whether the patients sort specialists intervention in the syndrome. The evaluation of the data would be useful because epilepsy is associated with undesirable threats, including deaths. It would enhance the taking of a precaution in case any signs are in observation.

Health service givers are responsible for making awareness of the various regulations and submission and limitations in place from different state organizations. Epileptic drivers and machine operators are not permitted driving and operating machines until when they are free from the illness (Kass, & Rose, 2019). When the condition is severe, acting the vehicles and tools would endanger the lives of the patient and the close inhabitants.

**Epidemiology Analysis**

Considering the Texas population in 2015, young individuals below the age of 16 years cover approximately 1.8% of the epileptic patients (Armstrong, Grant, Gilbert, Lee & Norden, 2016). Amid the patients of younger age, perinatal threats like placental abruption, breech conveyance, and eclampsia, incorporating background information of epilepsy, a three times upsurge is in realization. The percentage of the adults diagnosed to be having epilepsy in the research basing on the BRFSS presented data was approximately 4.4% of the entire epileptic population in the United States (Armstrong, Grant, Gilbert, Lee & Norden, 2016). Several patients were in records to be in the hospital through primary judgment while others in mention of being through secondary analysis.

The texts covering epidemiology validates socioeconomic position as a vital inconstant resulting from epilepsy patients as health welfare problems that are in observation among in epilepsy. Research indicates extreme cases among poor and vulnerable populations. The results advocate that inconsistencies in health welfare among epilepsy individuals might be a result of a massive portion of challenges with gauging wellness services, including insufficiency. It would hinder seeing a specialist for treatment. Behaviors to seeking treatment, observance of prescription and care plan, and wellness service results are in influence by the probable hazards (Buckley & Holmes, 2016).

A variety of wellbeing, operational, and life standard consequences and threats of the epilepsy individuals are in influence by their surroundings situations. It is where they grow, inhabit, educate, labor, oldness as well as worship. The societal elements comprise of socioeconomic position, learning, public support, entree to wellness services, and occupation (Director et al., 2020).An abandoned seizure may have adverse effects on an individual and be costly in medical expenses when the condition becomes severe, resulting in a drop in income and output.

The genetic alteration may also power an individual’s vulnerability to seizures through distressing mind growth. The tendencies of heredities and culture signify a constituent in the choice of treatment prescription. Various results advocate that the addition of chromosomal tests within analytical measures of epilepsy patients would generate a comprehensive appreciation of the function of genomic dysfunction within the pathogenesis of this illness (Buckley & Holmes, 2016).

**Screening and Guidelines**

One of the best tools of analysis applicable in the judgment of epilepsy includes electroencephalography (Boerwinkle, Mohanty, Foldes, Guffey, Minard, Vedantam & Adelson, 2017). The National Institute for Health and Clinical Excellence strategies advocates the performance of electroencephalography within a month. It is only when the medical past proposes epilepsy as a source of seizure. Therefore, advice on hospitalization would be in issuance regarding the extension of the nursing process. CT scan and MRI would be incorporated to reveal possible causes of the syndrome. It is also advantageous to apply video electroencephalography for caregivers in evaluating the medical consequences and electrographic discoveries. Indication drawn in earlier research supports the limitation of admission to wellness service as well as the absence of epilepsy awareness being inhibitions in restraining the judgment and the epilepsy care interruption (Boerwinkle, Mohanty, Foldes, Guffey, Minard, Vedantam & Adelson, 2017). It is particularly in fewer socioeconomically established residents having insufficient entree to health services.

**Plan: Integrating Evidence**

It is challenging for epilepsy patients to access improved, harmonized wellbeing services, incapacitating societal sigma, and discovering necessary care. Health professionals, such as nurses who are the trainers and promoters, are requested to advocate for the wellbeing and alertness of epileptic individuals together with their relatives (Townsend & Morgan, 2017). Some of the mediation in the improvement of the health service results includes the association of a comprehensive healthcare system. It addresses additional conditions to influence regulation of the syndrome as well as the patient's standard of living. Social awareness and support exertion on minimization of the societal stigma associated with this illness is a mediation that would assist affected individuals with the societal rulings as well as illness confines. Hence, making alertness and on time mediation as the chief goal would minimize possible risks of the condition such as suicide (Owens, 2017). No proven prescription in the present era to heal epilepsy.

Timely prenatal attention in spotting the illness is a crucial mediation that consists of quick recognition of circumstances that are not normal throughout gestation (Soontornpun, Choovanichvong & Tongsong, 2018). It minimizes risks of brain harm of the evolving fetus that might result in epilepsy or other associated mental disorders. Inhibition and initial care of mental disorder illness among endangered sets might stop the epilepsy existence (Hogan, 2019). Determination of the examination process as well as on the appropriate referrals for intermediation remains significant.

Other additional mediations include the elimination of occupation hindrances, augmenting learning chances, and giving admittance to facilities that improve care essentials for epilepsy persons (Director et al., 2020). Missing the development and implantation of programs and services which incorporate social determinants of the healthiness of epilepsy patients would remain to permit discrepancies, including reduced healthiness results for epilepsy persons. Provision of support, which influences the conduct of seeking care exhibitions, common causes, and entrée to a specialist, would advance epileptically healthiness inconsistencies.

Obedience to the care prescription compost in the mediations plan focuses mainly on treatment observance. It also includes associated consequences, reaching medical amenities, and identifying other variable threats in minimizing hospitalization of seizure patients (Dhakar et al., 2020). Community segregation is in contribution due to the increase in the dominance rate of mental illness linked to epilepsy as the sick fight in getting and maintaining their occupation (Abdulaziz & Zhou, 2020).The improvement of the psychological wellbeing, as well as community upkeep of the affected patients, relies on the endorsements and strategies adhered for testing, analyzing, treatment, and nursing of the sick.

**Summery/Conclusion**

In this study, crucial points concerning epilepsy as a chronic health condition are in revealing. Individual traits, socioeconomic and environmental positions, threats, reasons, comprising expenses, and period are usable in the epidemiological scrutiny. The seizure that is not inhibited results in diverse challenges and undesirable side effects (Hogan, 2019). Medical practitioners ought to make sure that patients with uninhibited seizures receive access to health services and personal management to address social health determinants such as mediation to regulate seizure, improving health standards with societal results, as well as minimizing expenses. Endorsements and strategies founded on the indication ought to incorporate medical arrangement and earlier health information of the sick. Comprehension of the epidemiology harmony would influence the delivery of wellbeing aims as well as common elements of obtainable health.

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