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PUBLIC ATTITUDE AND SOCIAL SUPPORT TOWARDS PEOPLE LIVING WITH EPILEPSY (PWE) AMONGST COMMUNITIES, IN A SELECTED LOCAL GOVERNMENT OF OYO STATE, NIGERIA

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ABSTRACT: *Introduction – The reaction to epilepsy is shaped by traditional indigenous beliefs. Therefore this study assessed the societal attitude and social support towards people living with Epilepsy in Ogbomoso. Methodology- The study adopted cross sectional descriptive design using 410 respondents selected through multistage sampling technique. Information was collected from the respondents using standardized instrument of Interviewer Administered Questionnaire (IAQ), Attitudinal Scale and Social Support Scale. Data were analysed using descriptive and inferential statistics at 0.05 level of significance. Results – In terms of attitude, 273 (68%) of respondents strongly agreed that PWE would be a burden to the family, 251 (62%) expressed fear during seizures, 215 (53.8%) were of the opinion that PWE should not get manned: 258 (64.5%) would not definitely help someone with seizure, 258 (64.5%) would not stay in the room with person with epilepsy. There was a significant association between respondent area of residence and their attitude (X^2 = 16.320, P = 0.012). Conclusion – It was concluded that there was a misconception about epilepsy resulting in negative attitude and poor social support towards People Living with Epilepsy.*

KEYWORDS: Public Attitude, Social Support, People Living with Epilepsy (PWE), Selected Local Government, Oyo State.

INTRODUCTION

Epilepsy is the most common non-infectious neurologic disease in African Countries, including Nigeria (Attotey & Reidpath 2007) and it remains a major medical and social problem (Bagley, 2007). Historically, epilepsy was believed to be a sacred disease, i.e, the result of the invasion of the body by a god. It was thought that only a god could deprive a healthy man of his senses, throw him to ground, convulse him and then rapidly restore him to his former self again[3] (Reynolds, 1988). The word ‘lunatic’ was first applied to sufferers of epilepsy as gods were thought to occupy heavenly spheres, one of which was the moon. In contrast, mad people were referred to as “maniacs” whose madness was a result of invasion of the body by devils or evil spirits (Osuntokun, 1978). In the Gospel according to Saint Mark Chapter 4, it was a foul spirit that was cast out of the young man with fits. The “Dictator Perpetuus” of the Roman Empire, the great Julius Caesar likely had epilepsy on the basis of documented four attacks that were probably complex partial seizures. Also, it is possible that he had attacks as a child and as a teenager. His son, Caesarion, and his great-great-great grand nephews Caligula and Britannicus also had seizures. The etiology of epilepsy in this

Julio-Claudia family is probably linked to inheritance[5] (Hughes, 2010). This historical legacy has continued to influence public attitude to epilepsy making it a dreaded disease. These believes have resulted in patients with epilepsy (PWE) being ostracized, stigmatized and misunderstood. The social implications are serious.

For instance, in Madagascar, Patients with epilepsy are refused burial in the family grave (Osuntokun, 1978). In many Africa countries, people with epilepsy are out-casts (Awaritife & Ebie, 2008) as Africans believe that the disease results from visitation of the devil, effect of witch-craft, the revenge of an aggrieved ancestral spirit or consumption of something harmful in utero[7] (Mkadir, 2009). Suicide or attempted suicide is not uncommon among Nigerians who suffer from epilepsy. The patient with epilepsy is likely to dropout of school, lose his job, find it impossible to marry, lose his wife or her husband, and be tormented to the extent of becoming a Vagrant Vagabond (Awaritife & Ebie, 20008). Given this background, there is a good reason for the increased concern about information on the societal attitude and social support towards people living with epilepsy. A better understanding of societal attitudes to mental illness and its treatment is an important prerequisite to the realization of successful community based programme (Mkadir, 2009) in order for nurses in the community based health facilities to protect the rights of those living with epilepsy and to sensitively develop services that will address their needs. It is vital to gain a more accurate knowledge of the societal attitudes and social support towards individual with epilepsy across a specific region and population group. There are three common approaches used to reproduce negative attitudes in the communities. These are education, contact and protest (Corrigan, 2012) which are major roles of nurses in the communities. Nurses seek to provide facts about mental illness in order to get rid of community held myths through health education. Contact (home visitation by public health nurses) aims to provide a human face on mental illness and hopes that treatment works. Protest (advocacy) aims to hold back biased messages and challenges commonly held toward mental illness. In some situations, education and contact have been found to be an effective strategy used to reduce mental health stigma among individuals (charyton, Elliot, Lu, & Moore, 2009).

Statement of Problem

Epilepsy is one of the global health issues affecting more than 65 million people worldwide, out of which 80% of those affected reside in developing countries[10] (WHO,2011) more than 50% of this figure are children below the age of 16years[11] (Thurman & Efy, 2011). In Nigeria, the estimated prevalence of epilepsy varies from 8 to 13 per thousand people[12] (Kabir, Iliyasu, Abubakar & Farinyaro, 2012). Misconceptions have led to social isolation for the individual with epilepsy and in many cases, for his or her family also[13] (Dekker, 2009). It is therefore no great surprise that the myths and prejudice that have surrounded epilepsy have resulted in the stigmatization of people with the disorder[14] (Vercarolis, 2009). Stigma is often a daily companion and can negatively affect an individual quality of life (QOL). It is a major contributor to the burden associated with epilepsy. Reducing the stigma of epilepsy is therefore a key to reducing its impact and improving quality of life. Effective educational programme needs to be developed and implemented to reduce the stigma of epilepsy. In African countries, the disorder is enrobed in superstitions, discrimination and stigma. Persons with epilepsy are at risk of developing a variety of psychological problems including depression, anxiety and psychosis – The socio-cultural attitudes continue to have a negative impact on management of epilepsy. Religious and socio-cultural beliefs influence the nature of treatment and care received by people with epilepsy. There is need to design educational programmes aimed at demystifying misconceptions about epilepsy. For such programme to be designed, it is vital to gain a more accurate knowledge of societal attitude and social support towards persons with epilepsy across a specific region and population.

Research Questions: The study answered the following questions

1. What are the societal beliefs of the respondent regarding the causes, symptoms and treatment of epilepsy?
2. What are the societal attitudes towards the persons living with epilepsy in urban and rural communities of Ogbomoso?
3, What are the levels of social support towards the persons living with epilepsy in urban and rural communities of Ogbomoso?
4. What are the socio-demographic factors responsible for different societal attitudes and levels of social support towards the persons with epilepsy in urban and rural communities of Ogbomoso?

Research Objectives: Research objective are to:

i. Determine the societal beliefs of Ogbomoso communities regarding the causes, symptoms and treatment of epilepsy;
ii. Assess the societal attitudes towards people living with epilepsy in Urban and Rural communities of Ogbomoso;
iii. Determine the levels of social support towards people living with epilepsy in urban and rural communities of Ogbomoso, and
iv. Evaluate the socio-demographic factors responsible for different societal attitude and levels of social support towards the persons with epilepsy.

Significance of the Study

Stigmatized attitude is accepted as one of the major barriers to the appropriate treatment of persons living with epilepsy. Actions to address the stigma and discrimination associated with epilepsy are being organized in the developed countries but little has been done to address the issue in Nigeria. Prior to embarking on such programme in Nigeria, the base –line attitude that will be object of change must be assessed.

This study would provide information on societal attitude and provision of social support towards person with epilepsy. This information would help in developing educational programmes which seek to reduce stigma and discrimination towards people with epilepsy.

The study might be a source of policy formulation, legislation and successful integration of mental health promotion, treatment and rehabilitation into the primary health care services in Nigeria.

Delimination of the Study

This study was delimited to individual between 18 to 64 years of age residing in urban and rural communities of Ogbomoso in Oyo State, Nigeria. It was delimited to the respondent irrespective of their religious application, educational level, employment status, socio-economic status and ethnicity.

LITERATURE / THEORETICAL REVIEW

Epilepsy – Epilepsy is a common neurological disorder characterized by recurrent unprovoked seizures (Shoron, 2009) it affects over 69 million people worldwide of whom 90% live in Resource Poor Countries (RPCs Ngugi, Chain, Rose & Maker, 2010). An estimated 500 million people are also affected indirectly as family members and friends of those who are living with epilepsy (WHO, 2006)

Prevalence

The prevalence of epilepsy is reported to vary substantially between developed and RRCs: estimated as 4-7 per 1,000 persons in the developed Countries (Sandar & Sharvon, 2008), and 5-74 – per 1,000 person in RPCs (Preux & Druet-Cabanac, 2009). The result of a recent systematic review suggests that the annual incidence in developed countries is approximately 44.9 per 100,000 of the general population whereas RPCs it is 80.3 per 100,000 (Ngugi, Chan, Rose & Maker, 2010). The high incidence rates in RPCs are attributable to parasitic and infectious diseases such as neurocysticerosis, toxocara, onchocerciasis and malaria, head injury, perinatal insult, possibly genetic causes, which may be the result of consanguinity in some areas (Placencia, Farmer, Jumbo, Sander & Shorvon, 2006; Pal, Pradeep & Vinod, 2008, Asindi, Amir, Roziner, Knol 4 Neufeld, 2005; WHO, 2008)

Categorization of Epileptic Seizures – Epileptic Seizures are divided into three (3) major categories: Partial (focal), generalized and unclassified seizures (Shorvon, 2009). Partial seizures arise from one part of the brain and generalized seizures probably arise from the central parts of the brain or spread so rapidly that their origin cannot be determined by standard techniques. Partial seizures are further divided into simple partial seizures where consciousness is maintained and complex partial seizures where there is impairment of consciousness (Shorvon, 2009; Dekker, 2009). The types of generalized seizures are absence seizures, tonic seizures, clonic seizures, myoclonic seizures, atonic seizures and tonic-clonic seizures (Shorvon, 2009; Dekker, 2009; Engel, 2006; ILAE, 2009; WHO, 2007). Unclassified epileptic seizures include all seizures which cannot be classified because of inadequate or incomplete data, or seizures that defy classification in the partial or generalize – Categories (Dekker, 2009).

Causes of Epilepsy – Epilepsy has many possible causes because anything that injures the brain can lead to seizures. The type of injury that can lead to a seizure is age-dependant. Seizures in children may be caused by birth traumas, infections such as meningitis, congenital abnormalities or high fever (febrile seizures) (Shorvon, 2009l Carter, Stoll, Youatt, Sweetman, Derry & Gorelick, 2008; Baulae, Jacoby Buck, Staglis & Monnet, 2009). Seizures in adulthood are commonly caused by head injuries, infections, alcohol withdrawal, stimulant drugs or medication side effects (Shorvon, 2009; Pal, Pradeep & Vinod, 2008a; Teasell, Bayona, Lippert, Villamere & Hellings, 2007; Gordon & Devinsky, 2001).

In the elderly, brain tumors and strokes cause a higher proportion of seizures (Shorvon, 2009; Camilo & Goldstein, 2010). However, not all seizures result from a structural problem in the brain. Epilepsy can also develop as a result of genetic abnormalities (Baulae, Jacoby, Buck, Staglis & Monnet, 2009) but in most epilepsy, the cause is not found (Shorvon, 2009). Epilepsy in RPCs can be prevented through various public health strategies. Prevention of trauma is the most effective way of preventing post-traumatic epilepsy, with use of head protection when riding motorcycles or bicycles (Pal, Pradeep & Vinod, 2008).

Epilepsy in developed countries – American beliefs about epilepsy differ from those observed in African or Asian cultures. Epilepsy was a well-recognized disease in pre-Columbian cultures, as Spanish chroniclers of the 16th Century reported (Carod-Artal & Vazque-Cabrera, 2007).

Several native societies persist in Central and South-America with a traditional medical system, empiricism, rites and initiations, whose knowledge is orally transmitted (Carol & Domenech, 1995). Epilepsy is caused by an attack suffered by animal spirit who accompanies the person, after a fight between the spirits who serve the forces of good and evil (Carod-Artal & Vazquez-Cabrera, 2007). People with chronic epilepsy are considered withches. Epilepsy is called “teawarup” by kamayura and is caused by the revenge of the spirit (Mama’e) of the armadillo killed by a huntsman. It is treated with two roots. Epilepsy is called “tukuri” by chipaya people, and it originated by a witchcraft that enters into the nose and the head, as a wind. Tukuri is treated with a ritual animal sacrifice called Willancha, and by taking several dried insect infusions and bind’s blood (Carod-Artal & Vazquez-Cabrera, 2007) for the hunter-fisher-gatherer tribe of Amerindians, epilepsy may be caused by an accident, the rupture of an animal-hunting taboo, familial violence, or due to witchcraft. Epilepsy cannot be dissociated from religious beliefs. Malefic powers can be originated either from the direct action of a harmful shaman or by interactions with the Devil. “Naturalism”, the disruption of the accompanying animal spirit of the person, is an explanation for epilepsy in many Meso-American cultures (Carod-Artal & Vazquez-Cabrera, 2007)

Epilepsy in Africa- The reaction to epilepsy in Africa is shaped by traditional indigenous beliefs which are surprisingly similar, in some way or other, throughout most of the African Continent and result in severe psychological hardship. The African epilepsy sufferers have and frequently sufferers have a hard time to achieve positive feelings about themselves and frequently suffer deprivations without prites (Jackie-LOU, 2008). In 1970, Osuntokun and Odeku reviewed 522 Nigerian epilepsy sufferers and observed that the patients suffered psychosocial handicaps including suicidal tendency because they themselves considered epilepsy a social disgrace. Modern treatment for epilepsy is often unavailable in Africa. The reason might be lack of treatment facilities, but also the general belief that epilepsy is of supernatural causation and therefore not treatable by Western medicine (Osuntokun &Odeku, 1970). In Uganda, epilepsy is thought to be a result of a lizard spinning around in circles in the head disturbing the brain causing dizziness, usually followed by a seizure. In Malawi epilepsy is thought to be due to an insect moving inside the stomach. In Swaziland epilepsy is thought to be caused by Sorcery, which sends evil animals or spirits into the body, causing convulsion (Andermann, 2011). A connection between the phases of the moon and convulsive attacks has been made since ancient times. It was and still is believed that either the new or the full moon is directly influencing and provoking seizure activity (Jackie-Lou, 2008). In 1997, the Global Campaign against epilepsy was launched to bring epilepsy- “out of the shadows” to reduce treatment gap and social and physical burden, educate health personnel, dispel stigma and support prevention (Diop, Chung, Nguyan & Tsung, 2010). The Global Campaign against epilepsy consists of providing a platform for general awareness and assist departments of health in developing national epilepsy programmes (Diop, Chung, Nguyan, & Tsung, 2010).

Beliefs about epilepsy in Africa – Studies indicate that negative beliefs about epilepsy are still prevalent among people with epilepsy (PWE) and general public (Geela, 2007). Beliefs are derived culturally from previous experience, education and what people have heard and learned from families, friends and/or story telling (Gureje, Lasebikan, Ephraim-Oluwanuga, Olley, & Kola, 2005). Beliefs about epilepsy affect the utilization of biomedical services, particularly the use of Antiepileptic Drugs (AED;s) (Martiniuk, Manion, Davidson, Clark, & Noris, 2009). In addition, several studies have indicated that beliefs and attitudes may affect the quality of life of PWE more than seizures themselves (WHO, 2008; Geefa, 2007).

Societal attitude towards epilepsy – The attitude of a person towards a certain object (person, word, or behavior) can be defined as a subjective evaluation of this object (Geefa, 2007). The subjective value of an object can be negative, neutral or positive. The objects of a person's attitude are not isolated elements; they exist in a complex relationship. Attitudes as well as all other cognitions can therefore be understood as semantic networks in which singular knots are connected by relationships. An attitude towards a certain object – depend on attitudes to other objects related to it. Attitudes include cognitive and effective components (Sander, 2011).

Ajzen & Fishbein (1980) stated that attitudes are formed by information processing they develop from those beliefs that people have about the attitude object societal attitude towards mental illness and neurological disorders like epilepsy have been the subject of scientific investigation for decades. Research findings from several countries have confirmed the global nature of negative attitudes towards the mentally ill (WHO Report, 2007).

Attitudes are generally understood to be formed through a process of individual subjective evaluation (involving a rational assessment of costs and benefits), but also influenced by affective and emotional responses and related beliefs. Erroneous beliefs about causation and lack of adequate knowledge have been found to sustain deep-seated negative attitudes about epilepsy (Jacoby, 2008). Conversely, better knowledge is often reported to result in improved attitudes towards people with epilepsy (Stuart & Arboleda-Florez, 2007) and a belief that epilepsy is treatable can encourage early treatment seeking and promote better outcomes. Vanzan and Paladin, in their paper, on epilepsy and Persian Culture to Avesta which is a collection of Zoroastrain texts from the 6th B.C. where it is referred to a sickness probably being epilepsy. It is reported that a god tells Zoroaster that person with epilepsy are prohibited from offering sacrifices in his honour (vanzan & Paladin, 2012). Persons suffering from epilepsy have been discriminated against in several ways. It is reported from many countries that families try to hide the disorder in a family so that person and other family members will be able to marry. It is difficult to get a job for a person who is suffering from epilepsy. Getting a driving license is often very problematic. Failure to get health insurance protection is also a common – problem in many countries (Quianatas, Muraq & Lugas, 2012).

There is a number of studies on the attitudes towards epilepsy and towards people with epilepsy as well as the experience of stigma and discrimination against persons suffering from epilepsy also mainly- performed in western countries (Bagley, 2007). There are, however, also a number of studies from low and middle income countries mainly focusing on the attitudes towards epilepsy in the general public (Fernandez 2011). In high income countries with modern treatment facilities and a more educated public, the problem with stigma because of epilepsy has decreased over the year (Jacoby, 2008, In low income countries the problem with the "treatment gap" still make that a lot of person suffering from epilepsy do not get proper treatment so the disorder still represents a major Public Health problem.

Factors Influencing Societal attitude PWE include the following:

* **Socio-demographic factors** – There have been conflicting reports on the association between socio-demographic factors and attitudes towards mental illness and neurological disorders, whereas, some studies have no correlations (Mukulo, 2009; Ngugi, Chan, Rose & Maker, 2010), some have demonstrated a significant association between socio-demographic factors and attitudes towards mental illness and neurological disorders (Adewuya & Makanjuola, 2008; Kabir, Iliyasu, Abubkar, & Farinyard, 2009; Lauber, Lundgren, Dahl, Melin & Kies, 2009). More negative attitude and high social distance towards the mentally ill has been found in association with the older age groups, female sex, not being married, unemployed and lower educational and socio-economic class (Lauber, Lundgren, Dahl, Melin & Kies 2009; Song, Riedel-Hepler, Matschinger & Angermayer, 2010).

***** **Urban residence: S**tuart and Arboeda-florez (2007), found that people in urban cities had a more negative attitude towards the mentally ill than people in rural areas. On the Contrary, in Fiji Island, Urban dwellers have a more positive disposition towards people with mental illness (Aghanwa, 2008). In the Karfi Village, Study in Northern Nigeria by Kabir, Iliayasu, Abubakar and Farinyard (2009), almost half of respondents harboured negative feelings towards the mentally ill.

Social Support Towards People Living with Epilepsy (PWE):

Social support can be categorized and measured in several different ways. There are four common functions of social (Dietrich et al, 2006):

- Emotional support is the offering of empathy, concern, affection, love, trust, acceptance, intimacy, encouragement, or caring. It is the warmth and nurturance provided by sources of social support. Providing emotional support can let the individual know that he or she is valued. It is also referred to as "esteem support "or "appraisal support".

- Tanglible support is the provision of financial assistance, material goods, or services. Also called instrumental support, this form of social support encompasses the concrete, direct ways people assist others.

- Informational support is the provision of advice, guidance, suggestions, or useful information to someone. This type of information has the potential to help others problem-solve.

- Companionship support is the type of support that gives someone a sense of social belonging (and is also called belonging). This can be seen as the presence of companions to engage in shared social activities.

Researchers also commonly make a distinction between perceived and received support.

Perceived support refers to a recipient's subjective judgment that providers will offer (or have offered) effective help during times of need. Received support (also called enacted support) refers to specific supportive actions (e.g., advice or reassurance) offered by providers during times of need (Angermeyer, Andrew, Rose, Mark, & Schulze, 2008).

Epilepsy severity is an important predictor of quality of life. Despite uncontrolled or poorly controlled seizures, some persons with epilepsy (PWE) are able to proceed with life relatively unencumbered. It has been suggested that the persons most debilitated by epilepsy are not those with the highest seizure rates, but rather those who lack social support (Bagley, 2007). Social support, "the commitment, caring advice and aid provided in personal relationships", is thought to buffer the negative impact of stressful events, ongoing life strains, and chronic health conditions (Kabir, Iliayasu, Abubakar, & Farinyard, 2009).

Several theories suggest that social support, especially from marriage, has a positive impact on health. Components of this support include providing greater economic resources, as well as fostering a sense of meaning, promoting healthy behaviors, reducing risk factors, and improving adherence to medical regimens (Kobau & Rosemarie, 2008). Married persons report better psychological and physical health compared with those who are not married. Previous epidemiological surveys have consistently found that PWE are more likely to report never being married compared with those without epilepsy (Panter & Kelly, 2008).

Persons with low social support are more likely to have psychological and physical ailments. Poor social support is a major risk factor for morbidity and mortality, with statistical effect sizes comparable to those of established risk factors such as cigarette smoking hypertension, high cholesterol, obesity, and physical activity (Kabir, Illiayasu, Abubakar, & Farinyard, 2009).

A recent meta-analysis of 148 studies examining social relationships and mortality risk found a weighted average effect size ratio of 1.50 (95% C1=1.42-1.59), indicating a 50% increased likelihood of survival in persons who were more strongly integrated in social networks and who received social support (Kobau & Rosemarie, 2008). This effect remained consistent across age, initial health status, cause of death, and follow-up period.

Life satisfaction is a stable global assessment of life experience from the positive perspective (interest in life, happiness, ease of living, well-being, and life success) (Awaritefe & Ebie, 2008). An overall judgment of life satisfaction examines the tangible aspects of life while weighing the good against the bad (Kabir, Iliayasu, Abubakr, & Farinyard, 2009). Poor life satisfaction has been found to predict both general mortality and suicide in a 20-year prospective study (Kobau & rosemarie, 2008). Life satisfaction has not been examined as much in epilepsy as in some other chronic illnesses despite a call for its inclusion in epilepsy-related quality of life research as far back as 1992 (Awaritefe, & Ebie, 2008).

On the basis of previous research, it was hypothesized that persons with active epilepsy who were married reported good social support Factors associated with social support include the following:

Gender differences: Gender differences have been found in social support research. Women provide more social support to others and are more engaged in their social networks. Evidence has also supported the notion that women may be better providers of social support. In addition to being more involved in the giving of support, women are also more likely to seek out social support to deal with stress, especially from their spouses (Kabir, Illiayasu, Abubakar, & Farinyard, 2009).

However, one study indicates that there are no differences in the extent to which men and women seek appraisal, information, and instrumental types of support. Rather, the big difference lies in seeking emotional support. Additionally, social support may be more beneficial to women. Dietrich and her colleagues in 2006 have suggested that these gender differences in social support to stress (i.e., flight or fight versus tend and befriend).

Married men are less likely to be depressed compared to non-married men after the presence of a particular stressor because men are able to delegate their emotional burdens to their partner. And women have been shown to be influenced and act more in reaction to social context compared to men. It has been found that men's behavior are overall more antisocial, with less regard to the impact their coping may have upon others, and women more social-active with importance stressed on how their coping affects people around them.

This may explain why women are more likely to experience negative psychological problems such as depression and anxiety based on how women receive and process stressors. In general, women are likely to find situations more stressful than males are.

Cultural differences: Although social support is thought to be a universal resource, cultural differences exist in social support. In many Asian cultures, the person is seen as more of a collective unit of society, whereas Western cultures are more individualistic and conceptualized social support as a transaction in which one person seeks help from another. In more interdependent Eastern cultures, people are less inclined to enlist the help of others (Dietrich et al 2006).

For examples, European Americans have been found to call upon their social relationships for social support more often than Asian Americans except social support to be less helpful than European Americans. These differences in social support may be rooted in different cultural ideas about social groups. It is important to note that these differences are stringer in emotional support than instrumental support. Additionally, ethnic differences in social support from family and friends have been found (Kabir, Iliyasu, Abubakar, & Farinyard, 2009).

Cultural differences in coping strategies other than social support also exist. One study shows that Koreans are more likely to report substances abuse than European Americans. Further, European Americans are more likely to exercise in order to than Koreans. Some cultural explanations are that Asians are less likely to seek it from fear of disrupting the harmony of their relationships and that they are more inclined to settle their problems independently and avoid criticism. However, these differences are not found among Asians Americans relative to their Europeans American counterparts (Angermeyer, Andrew, Rose, Mark, & Schulze, 2008).

Theoretical Framework: Theory of Reasoned Action

Theoretical framework gives order and lays put a map of progression for the study. It allows the researches to identify why and how variables of interest may be related to one another. Also it makes possible to account or changes in the variable. The theory of reasoned action (TRA) developed by Ajzen Icek and Martin |Fishbein and in 1980 is the theoretical framework that guides this study. This theory suggests behavior is determined by the individual’s intention to perform the behavior. Intention to perform the behavior develops due to the person’s personal attitude toward the chosen behavior, her belief in her ability to perform the behavior, and the perceived attitudes of society (normative) toward that chosen behavior (Ajzen & Fishbein, 1980). Miller (2005) defines each of the components of the theory a follows:

- ATTITUDE: The individual’s positive and negatives feelings about performing a behavior. It is determined through an assessment of one’s beiefs regarding the consequences arising from a behavior and an evaluation of the desirability of the consequences.
- SUBJECTIVE NORMS: looks at the influence of people in one social environment on his behavior intentions. The beliefs if people, weighted by the importance one attributes to each of their opinions, will influence one’s behavioral intention.
- BEHAVIORAL INTENTION: A function of both attitudes towards a behavior and subjective norms toward that which has been found to predict actual behavior.

Application of the theory to the study

The aim of the project is to analyze the simple idea that people’s attitudes to epilepsy have a significance effect on their level of social support towards them. If the attitude is positive, the social support will be good. The above variables are themselves affected by a number of factors, however, and it is this which creates the complexity in analyzing the simple relationship.

According to Fishbein (1980), there are two components of attitude: thoughts and feelings. Attitudes and behavior are correlated, but they are not always the same: a person can think and fell in one way but act in another (even opposite) way. Attitude can neither be positive or negative. Moreover, the strength with which the attitudes are held can be affected by many factors such as direct experience.

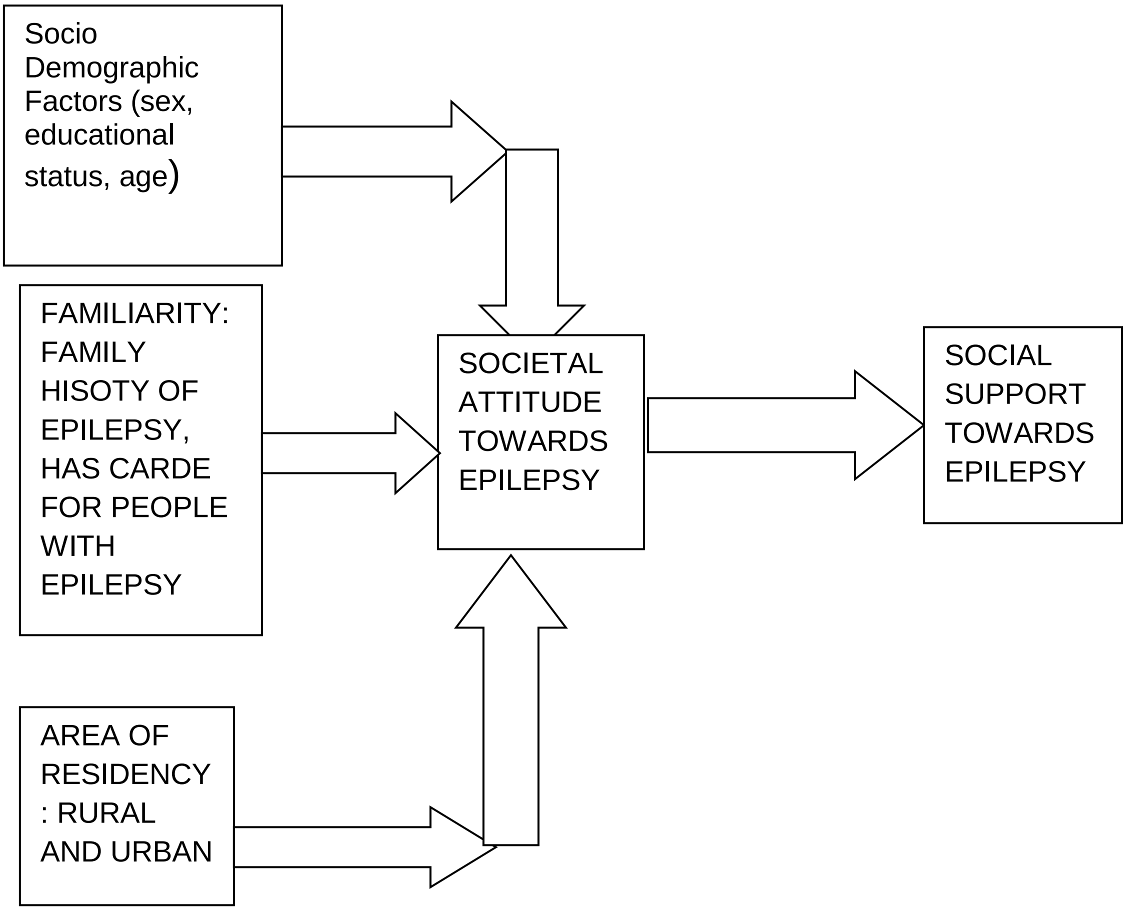

Fig 1: Conceptual Framework for the study developed by the author based on Theory of Reasoned Action by Azjen and Fishbein (1980)

Research hypothesis

The following are tested on the literature review;

- There is no significant association between the societal attitude people living with epilepsy and respondents area of residence.
- There is no significant association between the level of social support towards people living with epilepsy and respondents area of residence.
- There will be no significant association between the respondents' age, sex, level of education and their attitude towards people living with epilepsy

Research design

This study utilized a community based cross-sectional survey to examine the societal attitude and level of social support towards people living with epilepsy in Ogbomoso.

Study population

The study was carried out among individuals between the ages of 18years and 64years residing in Ogbomoso community of Oyo State, Nigeria.

Study setting

The study was carried out in the urban and rural communities of Ogbomoso. Ogbomoso is a city in Oyo State, Southwestern Nigeria. It was founded in the mid 17th century. The population was approximately 645,000 in 1991; by March2005, it was estimated at around 1,200,000(NPC, 2006). It is located between Oyo and Ilorin which are only thirty miles to the north and south. It has five local government areas which are Ogbomoso North, Ogbomoso South, Orire, Ogo Oluwa and Surulere Local government.

Ogbomoso has two degree-granting institutions of higher learning. Ladoke Akontola University is named for the illustrious Ogbomoso son and premier of the old Western Nigeria, Samuel Ladoke Akintola. It awards degrees in science, engineering, technology and medicine. Baptist medical Center (BMC) Ogbomoso found in 1907 transformed to Bowen University Teaching Hospital in December, 2009. It involves in training General Medical Practitioners and Nurses. Majority of the people in the city are Yoruba-speaking it is home to people from different ethnic groups, many of whom were attracted to the town by the educational, medical, commercial, farming and other activities.

Sample Size Determination

A sample size of 400 respondents (200 each in urban and rural communities) was used as derived from Yamane’s formula for calculating sample size.

$n=N / 1+N (e)^2$,

Where n= Sample size,

N= 1200000 which is the population size of Ogbomoso (NPC, 2006),

e= the acceptable sampling error (|For this study, 5% is chosen (0.05) at confidence level of 95%.

$n = 1200000 / 1+1200000(0.05)^2$, $n = 1200000/ 1+1200000 (0.0025)$, $n = 1200000/ 3001$,

n =399.8667, rounded up to 400.

Sampling technique

Multi sampling technique was employed for this study. Ogbomoso has five local government areas which is divided into urban (Ogbomoso North and South Local Government Area) and rural community (Orire, Ogo Oluwa and Surulere Local Government Area).

- Using a simple random sampling, Ogbomoso North Local Government area was selected in the urban community and Surulere Local Government Area was selected in the rural community.
- Two hundred respondents were selected from each of these local government areas.

- Each local government has 10 election wards, 20 respondents were randomly selected from each 10 wards from each LGA.

- The first house was selected from the streets through a random sampling technique and every third house was selected thereafter until the required number was achieved for each ward. In the houses, only one individual was randomly selected.

Study instruments

Respondents were interviewed using a pre-tested, interviewer-administered, structured questionnaire. The questionnaire consists of different sections.

Socio-demographic characteristics: age, sex, marital status, religion, ethnicity, educational status, employment status and occupation.

Familiarity with epilepsy: 5 questions enquired about familiarity with epilepsy.

Attitude towards persons with epilepsy: It is adapted from Epilepsy Attitude Questionnaire developed by Ng & Chan (2000). The items measures specific aspects of expected behavior which includes stereotyping, restrictiveness, benevolence, and stigmatization. It is a 5-point Likerk scale ranging from strongly agreed (5) to strongly disagreed (1). The sum of scores for each respondent was converted to 100 point scale with a score of less than 50 points classified as **positive attitude** while score of 50 and above are classified as **negative attitude**.

Beliefs about persons with epilepsy: This section contains 23 items assessing respondents' beliefs about people with epilepsy. It is adapted from the Brazilian version of the Epilepsy Beliefs Scale (EBS) – Adult Version (Chung et al., 2010). The instrument was designed to assess beliefs of the general community towards person with epilepsy. Participants were asked to select within a Likert scale of four points which of the following responses represent the intensity degree of belief for each item: (4) strongly believe, (3) believe, (2) believe a little (1) not at all. The answer "strongly believe (4)" is considered excellent, the answer "believe (3)" is considered good, "believe a little (2)" is regular, and the answer "do not believe (1)" is considered bad.

Social support towards persons with epilepsy: This section contains 8 items assessing respondents' support towards people with epilepsy. It includes questions on marriage, employment, caring during epileptic attack e.t.c. Answers are given on a 4-point likert-type scale ranging from definitely (1) to definitely not (4). When the support is positive as in question 1, 3, 6, and 8: Definitely (1) is considered excellent, Probably (2) is considered good, Probably not (3) is considered fair and Definitely not (4) is considered poor. The analysis of the responses occurs reversely when the support is negative as in question 3, 4, 5, 7. The sum of scores for each respondent was converted to 100 point scale with a score of less than 50 points classified as **good social** support while score of 50 points and above are classified as **poor social support.**

Respondents' knowledge about management of epileptic seizure: This section contains 10 items assessing respondents' knowledge about management of epileptic seizure. No point was given for wrong answer while the correct answer to the knowledge question was given a score of one point. Based on such grading, a total of 10 points were allocated to this section.

Those who scored 7-10 points were considered to have a **good knowledge;** 4-6 points had **fair knowledge** while a score of 0-3 point was considered as **poor knowledge**.

Translation of the instrument

The study instruments were translated into Yoruba by a Yoruba speaking psychiatrist. Precise idiomatic equivalents were employed as much as possible. The back translations, which were performed independently by another psychiatrist translator was compared with the original translation and confirmed to be satisfactory before use.

Validity and reliability of the instrument

For validity, the questionnaire was subjected to close scrutiny and reviewed by supervisor. The questionnaires drawn were examined to ensure that they fulfill the objective of the study. In order to examine the reliability of the instrument, a test retest was carried out. A total number of 40 participants were recruited from a community with similar socio-demographic characteristics as subjects in the actual study. The subscale of epilepsy attitude has good internal consistency of cronback's alpha coefficient of 0.856, 0.884 for the epilepsy belief sub-scale, 0.921 for the social support subscale and 0.903 for the subscale of knowledge of management of epileptic seizure.

Data collection

Four trained interviewers, who are Registered Nurses, fluent in both Yoruba and English languages administered the questionnaires to the sample populations under the supervision of the Researcher. Informed consent was first taken from the participants after the aims and objectives of the study had been explained to them. Most of the interviews were conducted in the evenings and weekends in order not to exclude the respondents working away from home. For literate participants, the questionnaires were given to them for self-completion and for the non-literate participants; the interviewers read out the questions and recorded their answers.

Ethical consideration

Ethical approval was obtained from the Ethics Committee, Institute of Public Health, OAU, Ile-Ife and permission from the two local government authorities was obtained too. Consent was obtained from the respondents after the purpose of the study had been explained to them. The respondents were assured of confidentiality and security of data. They were also assured that they can decline participation in the research without any prejudice. Before questionnaires were administered.

Method of data analysis

Data entry and analysis was done using the Statistical Package for Social Sciences (SPSS) software, version 21. The data was subjected to descriptive and inferential statistical analysis. Data was summarized using frequencies, distribution tables and cross tabulation. The Chi square was used to test the level of significance between the categorical variable. Binary logistic regression analysis was used to explore the predictors of societal attitude and social support towards persons with epilepsy.

RESULTS:

Table 1: Socio-demographic Characteristics of the Respondents

Variable	Frequency n=400	Percentage (%)
Age group (Years)		
18-24	103	25.8
25-34	134	33.5
35-44	75	18.8
45-54	63	15.8
55-64	25	6.1
Sex		
Male	187	46.8
Female	213	53.2
Marital status		
Single	186	46.5
Married	205	51.2
Divorced	5	1.2
Widowed	4	1.1
Religion		
Christianity	252	63
Islam	142	35.5
Traditional	5	1.2
Others	1	0.3
Ethnicity		
Yoruba	367	91.8
Igbo	11	2.8
Hausa	16	4
Others	6	1.4
Educational		
None	36	9
Primary	62	15.4
Secondary	115	28.8
Non-university tertiary	127	31.8
University	60	15
Occupation		
Civil servant	107	26.8
Student	96	24
Trading	85	21.2
Farming	57	14.2
Artisan	30	7.5
Professionals	13	3.3
Others	12	3

Table 4.1 above showed the socio-demographic of the respondents. Four hundred respondents were recruited for the study with the mean age of 33.6 years (SD= 1.1). Most of the respondents were less than 45years (78.1%) and 53.2% were females. Majority of the subjects (51.2%) were married.

Table 2: Distribution of the Mean and Standard Deviation on Epilepsy Belief Scale

Persons has epilepsy because	Mean	Standard Deviation
It is God's will	1.73	1.07
He is possessed by the evil spirit	3.10	1.18
He inherits it from his parent	2.26	1.00
Of change in the phase of the moon	1.58	0.89
By touching someone who is having seizure	2.88	1.26
Of blood circulation to the brain	2.50	1.21
Of birth injury	2.32	0.98
Of serious disease affecting the brain	2.41	1.16
Of sudden changes in weather	2.19	1.17
Of certain foods or drinks	1.68	0.97
Of sudden changes in his mood	2.31	1.19
When he is very angry about something	2.49	1.26
Of genetic defects	3.05	1.27
PLWE have excessive salivation during a fit	1.58	0.85
PLWE lose their consciousness during a fit	1.76	0.96
Convulsion is a sign of epilepsy	3.25	1.06
Upward rolling of eyeballs is a sign of epilepsy	1.89	1.07
Hospital is the best place to care for a person with epilepsy	1.61	0.92
A spiritual leader can cure epilepsy	1.77	0.10
An herbalist can cure epilepsy	2.61	1.92
No real cause for epilepsy	2.17	1.03
Metallic item can draw away seizure	1.85	1.05
Put something in their mouth during seizure to Prevent them from swallowing their tongue	2.18	1.18

The table above revealed the mean score of EBS of person has epilepsy because he is possessed by the evil spirit as the highest mean score 3.10+ 1.18. This is followed by touching someone who is having seizure and through inheritance with mean scores ~~of~~ 2.88 + 1.26 and 2.26+ 1.00 respectively. The table also revealed that an herbalist can cure epilepsy has the mean score of 2.61+1.92 as the highest means score.

Table 3: Respondents Attitude toward People Living with Epilepsy (PWE)

People with epilepsy	Strongly Agree (%)	Agree (%)	Neutral (%)	Strongly Disagree(%)	Disagree (%)
Is a burden to the family	272(68)	80 (20)	17(4.2)	11(2.8)	20 (5)
Becomes more spoiled and needs more attention	175(43.8)	114(28.5)	33(8.2)	25(6.2)	53(13.2)
Should be allowed to swim only in the presence of their parents	43(10.8)	53(13.2)	95(23.8)	98(24.5)	111(27.8)
Should not participate in any physical activities	49(12.2)	82(20.5)	61(15.2)	109(27.2)	99(24.8)
Should stop taking anticonvulsant once his	41(10.2)	77(19.2)	39(9.8)	126(31.5)	117(29.2)

seizures are under control					
Have epileptic seizures when he has not slept well	51(12.8)	147(36.8)	63(15.8)	53(13.2)	86(21.5
Takes epileptic medication only when he had an epileptic seizure	44(11)	82(20.5)	29(7.2)	121(30.2)	124(31)
Is often rejected by his peers	92(23)	175(43.8)	32(8)	43(10.8)	58(14.5)
Is thought less of by people	95(23.8)	190(47.5)	27(6.8)	42(10.5)	469(11.5)
Tends to keep himself in isolation	127(31.8)	138(34.5)	29(7.2)	43(10.8)	63(15.8)
Should be taught how to conceal his epilepsy	52(13)	114(28.5)	38(9.5)	73(18.2)	123(30.8)
Should be fear during an epileptic seizure	251(62.8)	101(25.2)	19(4.8)	6(1.5)	23(5.8)
Is unreliable	53(13.2)	109(27.2)	68(17)	61(15.2)	109(27.2)
Should not be married	215(53.8)	116(29.0)	25(6.2)	28(7.0)	16(4.0)

Table 4: Socio-demographic Characteristics of Respondent and their Attitude Towards People Living with Epilepsy

Variable	**Positive attitude N=172**	**Negative Attitude N=228**	**X^2**	**Df**	**p-value**
Residency					
Rural	66(33%)	134(67%)	16.320	1	0.012
Urban	106(53%)	94(47%)			
Age group (years)					
18-24	37(35.9%)	66(64.1%)	7.309	4	0.004
25-34	54(40.3%)	80(59.7%)			
35-44	41(54.7%)	34(45.3%)			
45-54	30(47.6%)	33(52.4%)			
55-64	10(40%)	15(60%)			
Sex					
Male	83(44.4%)	104(55.6%)	0.275	1	0.020
Female	89(41.8%)	124(54.2%)			
Marital status					
Single	63(33.9%)	123(66.1%)	13.586	3	0.010
Married	103(50.2%)	102(49.8%)			
Divorced	4(80%)	1(20%)			
Widowed	2(50%)	2(**50**%)			
Religion					
Christianity	110(43.7%)	142(56.3%)	0.894	3	0.120
Islam	60(42.3%)	82(57.7%)			
Traditional	2(40%)	3(60%)			
Others	0(0%)	1(100%)			
Ethnicity					
Yoruba	162(44.1%)	205(55.9%)	2.992	3	0.393

Igbo	4(36.4%)	7(63.6%)			
Hausa	5(31.2%)	11(68.8%)			
Others	1(16.7%)	5(83.3%)			
Educational					
None	3(8.3%)	33(91.7%)	22.996	4	0.220
Primary	32(51.6%)	30(48.4%)			
Secondary	59(51.3%)	56(48.7%)			
Non-university tertiary	54(42.5%)	73(57.5%)			
University	24(40%)	36(60%)			
Occupation					
Civil servant	50(46.7%)	57(53.3%)	20.231	6	0.100
Student	40(41.7%)	56(58.3%)			
Trading	49(57.6%)	36(42.4%)			
Farming	12(21.1%)	45(78.9%)			
Artisan	12(40%)	18(60%)			
Professionals	4(30.8%)	9(69.2%)			
Others	5(41.7%)	7(58.3%)			

Table 4 above showed the socio-demographic characteristics of the respondents and the attitude towards people living with epilepsy. Negative attitude towards people living with epilepsy is particularly prominent amongst those living in the rural areas (67%), aged above 35 years (54.7%), females (55.6%), single (49.8%), Muslims (57.7%) and those who had no formal education (91.7%).

Table 5: Association between Societal Attitude towards Epilepsy and Selected Socio-Demographic Variable Using Binary Logistic Regression

Variable	**Odds Ratio(OR)**	**p-value**	**95%CL**
Residency			
Rural(ref)	1	-	
Urban	2.24	0.01	0.20-0.64
Age group			
18-24years (ref)	1	-	
25-34	1.06	0.04	0.13-3.32
35-44	0.652	0.61	0.16-2.79
45-54	0.660	0.57	0.21-3.63
55-64	0.879	0.86	0.10-1.72
Sex			
Male(ref)	1	-	
Female	3.17	0.02	0.67-2.55
Marital status			
Single (ref)	1	-	
Married	3.28	0.032	0.07-0.58
Divorced	2.02	0.001	0.06-0.47
Widowed	2.31	0.002	0.04-0.25

‘Ref’ indicates the reference point which is the variable to which others are being compared.

In the first regression model constructed (Table 5), it was found that those who are married have three times chances of having positive attitude compared with being single. Respondents that were older also had lower odds for having negative attitude than the younger ones. Females were more likely to show positive attitude than the male. Those living in urban area were also found to have two times chances of having positive attitude compared to those living in rural areas.

Table 6: Respondents' Social Support towards PEW

Would you	**Definitely (%)**	**Probably (%)**	**Probably not(%)**	**Definitely not(%)**
Help someone having seizure	67(16.8)	61(15.2)	14(3.5)	258(64.5)
Be upset about working with epileptic person	94(23.5)	102(25.5)	74(18.5)	130(32.5)
Be able to be friend with epileptic person	55(13.8	73(18.2)	41(10.2)	231(57.8)
Staying in the same room with epileptic person	67(16.8)	61(15.2)	14(3.5)	258(64.5)
Feel ashamed of having epileptic person in your family	295(73.8)	26(6.5)	45(11.2)	34(8.5)
Marry epileptic person	66(16.5)	75(18.8)	17(4.2)	242(60.5)
Have a conversation with epileptic person	165(41.2)	63(15.8)	64(16)	108(27)
Have epileptic person to work in your home	74(18.5)	101(25.2)	89(22.2)	136(34)

Table 7: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS AND THEIR SOCIO SUPPORT TOWARDS PEOPLE LIVING WITH EPILEPSY

Variable	**Good social Support N=172**	**Poor social Support N=228**	**X^2**	**df**	**P-value**
Residency					
Rural	68(34%)	132(66%)	13.219	1	0.010
Urban	104(52%)	96(48%)			
Age group (Years)					
18 - 24	53(51.5%)	50(48.5%)	9.881	4	0.240
25 - 34	62(46.3%)	72(53.7%)			
35 – 44	22(29.3%)	53(70.7%)			
45 – 54	26(41 .3%)	37(70.7%)			
55 – 64	9(36%)	16(64%)			
Sex					
Male	75(40.1%)	112(59.9%)	1.199	1	0.030
Female	97(45.5%)	116(54.5%)			
Marital status					
Single	96(51.6%)	90(48.4%)	11.357	3	0.210
Married	73(35.6%)	132(64.4%)			
Divorced	1(20%)	4(80%)			
Widowed	2(50%)	2(50%)			
Religion					
Christianity	134(53.2%)	118(46.8%)	29.110	3	0.300
Islam	37(26.1%)	105(73.9%)			

Traditional	1(20%)	4(80%)			
Others	0(0%)	1(100%)			
Ethnicity					
Yoruba	161(43.9%)	206(56.1%)	2.739	3	0.434
Igbo	5(45.5%)	6(54.5%)			
Hausa	5(31.2%)	11(68.8%)			
Others	1(16.7%)	5(83.3%)			
Educational					
None	6(16.7%)	30(83.3%)	6.773	3	0.020
Primary	22(35.5%)	40(64.5%)			
Secondary	47(40.9%)	68(59.1%)			
Non-university tertiary	59(46.5%)	68(53.5%)			
University	38(63.3%)	22(36.7%)			
Occupation					
Civil servant	56(52.3%)	51(47.7%)	20.455	6	0.120
Student	51(53.1%)	45(46.9%)			
Trading	34(40%)	51(60%)			
Farming	13(22.8%)	44(77.2%)			
Artisan	10(33.3%)	20(66.5%)			
Professionals	5(38.5%)	8(61.5%)			
Others	3(25%)	9(75%)			

Table 7 above showed socio-demographic characteristics of the respondents and their social support towards people living with epilepsy. Good social support towards people living with epilepsy is particularly prominent amongst those living in the urban areas (52%), aged below 34 years (46.3%), females (45.5%), singles (51.6%), Christians (53.2%) and those who had university education (63.3%)

TABLE 8: ASSOCIATION BETWEEN RESPONDENTS SOCIAL SUPPORT TOWARDS EPILEPSY AND SELECTED SOCIO-DEMOGRAPHIC VARIABLE

Variables	**Odds Ratio (OR)**	**p-value**	**95%CL**
Residency			
Rural (ref)	1	-	
Urban	0.24	0.03	0.168-28.64
Sex			
Male(ref)	1	-	
Female	1.79	0.291	0.506-1.23
Education			
None(ref)	1	-	
Primary	1.024	0.02	0.06-0.682
Secondary	3.228	0.03	0.135-0.796
Tertiary non-university	3.469	0.01	0.225-0.977
Tertiary university	3.548	0.04	0.275-1.092

'Ref' indicates the reference point which is the variable to which other are being compared.

In the second regression model constructed (Table 8), it was found that being a female and higher educational qualification increases the chances of giving support to persons with epilepsy by two fold and three fold respectively compared to a male and those with lower educational qualification. Also respondents that live in rural areas had lower odds for giving support to persons with epilepsy compared to those living in urban areas.

Hypothesis Testing

Null hypothesis 1

There is no significant association between respondents' areas of residence and their attitude towards people living with epilepsy

TABLE 9: ASSOCIATION BETWEEN RESPONDENTS AREA & RESIDENCE AND TOWARD PWE ATTITUDE

Variable	Position Attitude N=172	Negative Attitude N=228	df	p-value
Residence				
Rural	66(33%)	134(67%)	16.320 1	0.012
Urban	106(53%)	94(47%)		

As shown in the table above, x^2=16.320, df =1, p=0.012. The p-value from the calculation is 0.012, which is less than 0.05. For null hypothesis is rejected, the p-value must be less than 0.05, that is, $p<0.05$. Hence, the null hypothesis is rejected, meaning that there is a significant association between the societal attitude towards people living with epilepsy and respondents area of residence.

Null hypothesis 2

There is no significant association between the level of social support towards people living with epilepsy and respondents' area of residence.

TABLE 10: ASSOCIATION BETWEEN THE LEVELS OF SOCIAL SUPPORT TOWARDS PWE

Variable	Good social Support N= 172	Poor social Support N= 228	X^2	df	p-value
Residency					
Rural	68(34%)	132(66%)	13.219	1	0.010
Urban	104(52%)	96(48%)			

As shown in Table above, X^2 = 13.219, df = 1, p = 0.010. The p value from the calculation is 0.010, which is less than 0.05. For null hypothesis to be rejected, the p value must be less than 0.05, that is, $p<0.05$. Hence, the null hypothesis is rejected, meaning that there is a significant association between the level of social support towards people living with epilepsy and respondents' area of residence.

Null hypothesis 3

There is no significant association between respondent's age and their attitude people living with epilepsy.

TABLE 11: ASSOCIATION BETWEEN RESPONDENT'S AGE AND ATTITUDE TOWARDS PWE

Variable	Positive Attitude N=172	Negative Attitude N=228	X^2	df	p-value
Age group (Years)					
18-24	37(35.9%)	66(64.1%)	7.309	4	0.004
25-34	54(40.3%)	80(59.7%)			
35-44	41(54.7%)	34(45.3%)			
45-54	30(47.6%)	33(52.4%)			
55-64	10(40%)	15(60%)			

As shown in Table4.7, x^2=7.309, df= 4, p= 0.004. The p-value from the calculation is 0.004, which is less than 0.05. For null hypothesis to be rejected, the p- value must be less than 0.05, that is, $p<0.05$. Hence, the null hypothesis is rejected, meaning that there is significant association between respondent's age and their attitude towards people living with epilepsy.

Null hypothesis 4

There is no significant association between respondent's sex and their attitude towards people living with epilepsy.

Table 12: Association between respondent sex and their attitude towards people living with epilepsy PWE

Variable	Positive Attitude N=172	Negative Attitude N=228	X^2	Df	p-value
Sex					
Male	83(44.4%)	104(55.6%)	0.275	1	0.020
Female	89(41.8%)	124(58.2%)			

As shown in Table4.7, x2=0.275, df =1, p=0.020. The p value from the calculation is o.020, which is less than 0.05. For null hypothesis to be rejected, the p value must be less than 0.05, that is, $p<0.05$. Hence, null hypothesis is rejected, meaning that there is significant association between respondent's sex and their attitude towards [people living with epilepsy.

Null hypothesis 5

There is no significant association between respondent level of education and their attitude towards people living with epilepsy.

Table 13: Association between respondent level of education and their attitude towards PWE

Variable	Positive Attitude N=172	Negative attitude N=172	X^2	Df	P=value
Educational					
None	3(8.3%)	33(91.7%)	22.996	4	0.220
primary	32(51.6%)	30(48.4%)			
secondary	59(51.3%)	56(48.7%)			
Non-university tertiary	54(42.5%)	73(57.5%)			
university	24(40%)	36(60%)			

As shown in Table above, x^2=22.996, df =4, p=0.220, The p-value from the calculation is 0.220, which is greater than 0.05. For null hypothesis to be rejected the p value must be less than 0.05, that is, $p<0.05$. Hence the null hypothesis is accepted, meaning that there is no significant association between respondent's level of education and their attitude towards people living with epilepsy.

DISCUSSION OF FINDINGS

Characteristics of the respondents

This study assessed the societal attitude and social support towards persons living with epilepsy in urban and rural communities of Ogbomoso, Oyo State of Nigeria. Four hundred respondents were recruited for the study, two hundred respondents each from the rural and urban communities.

Most of the respondents were less than 45years old (78.1%) and this distribution is characterized of a young population which s common finding in most developing countries of West African sub-region. There were more females (53.25) than males (46.8%) in this study and most of the respondents (51.2%) were married. Majority were Christians of Yoruba ethnicity who had tertiary school education. Majority of the respondents (45.2%) were employed and most 26.8% are civil servant.

Familiarity with epilepsy

The responses to questions related to familiarity with epilepsy are listed in Table 2. All the respondents had read about or heard of epilepsy, 44% have heard contact with someone with epilepsy. Only 27.8% of them have cared for someone with epilepsy and 9% of them have a family member/ friend with epilepsy. 73% of the respondents called epilepsy ‘warapa’ in their local language. Other local names for epilepsy are waku, giri, yoadusi, ifofo, iheodudo, farfadiya, epipi, dichichire, gbani, gidaku, and ndondo.

This is in line with the finding of Lew (2012) that reveals high level of awareness among his respondents, Eighty-two percent of the respondents in his study have heard of epilepsy, 63% of the respondents ‘knew someone with epilepsy’ and 59% had seen someone with epilepsy.

Societal belief about persons with epilepsy

This study demonstrated a widespread belief regarding spirit possession as the main cause of epilepsy. This is followed by genetic inheritance (73.8%) and brain infections (57.8%). Other causes of epilepsy that respondents mentioned were; birth injury or trauma (58.8%), God's will (47%) and changes in the phase of the moon (44.2%). This trend is in agreement with earlier studies in this regard. Kabir et al. (2009) found that most people in a Northern Nigeria community (34.3%) believed that spirit possession is the main cause of mental illness. This was followed by divine punishment from God (18.8%) and genetic inheritance (18.0%). This similarity may be due to a common belief in African society that most diseases affecting the brain or mind are assumed to be due to affliction by evil spirit.

A recent study among the Yoruba communities in Nigeria (Gurege et al., 2005) found that the most commonly reported beliefs concerning the cause of mental illness were drug and alcohol misuse (80.8%), possession by evil spirit (30.2%), traumatic events or shock (29.9%) and genetic inheritance (26.5%).

Majority of the respondents (68.8%) mentioned that epilepsy is manifested by foaming of mouth. Other manifestations of the disorder proffered by the respondents include rolling of eyes (64.8 %), convulsion (46.0%) and loss of consciousness (37.5%).

Also the findings revealed that majority of the respondents' preferred alternative sources of help to western medicine for the management of the epilepsy. Most of them 65.2% believed that a spiritual leader can cure epilepsy while 59.5% believed that an herbalist can cure epilepsy, its only few of them 41.2% that's believed hospital is the best place to care for epilepsy. This is in line with previous studies in Northern and Western Nigeria that have suggested that care for mental illness is most often sought from the traditional healers (Kabir et al, 2009). The preference for spiritualist and traditional healers by the respondents may not be unconnected with the perceived supernatural causation of mental illness as we have seen earlier.

Attitude towards persons living with epilepsy

Findings from this study showed that there are still many misconceptions about epilepsy, existing within the communities. Major misconceptions include: Epilepsy cannot be cured, epilepsy is contagious, a person with epilepsy is not as smart as average people and does poorly in school, parent do not allow their child to participate in any activity at school, a person with epilepsy is often rejected and feared during attack, a person with epilepsy should not married and bear children and majority agreed to have a divorce or separate spouse if diagnosed of epilepsy.

Earlier study in Zamboanga city in Mindanao, Philippines (Jackie Lou, 2008) also revealed similar findings. 66.8% was of the opinion that persons with epilepsy should not marry, 62.4% said they should not bear children while 97.2% believed that a person with epilepsy should not be allowed to drive. This is chiefly on the concerns of the respondents towards safety of persons with epilepsy. 58.2% of the respondents agreed that having a child with epilepsy is a burden to the family and a child with epilepsy becomes more spoiled and needs more attention.

In this study 57% of the respondents could be classified as having a negative attitude towards people with epilepsy. Rural dwellers were found to have a more negatives attitudes than urban dwellers. This is contrary to findings of Stuart and Arboeda-Florez (2011) that reported that people in urban cities had more negative attitudes towards the mentally ill than people in rural areas. This may be due to the fact that the respondents from the urban area were more educated and may have access to current health information from different studies.

The study also reveals that respondents with good knowledge of epilepsy have a higher percentage of positive attitudes (60.8%) while those with poor knowledge have a lower percentage of positive attitudes. This position was also supported by Kabir et al (2009) who posits that better understanding of mental disorders is an important perquisite in the successful eradication of stigma attached to it.

Also findings of Jackie Lou (2008) reported that respondents with good knowledge of epilepsy have a positive attitude while respondents with poor knowledge of epilepsy have a negative attitude.

Level of social-support towards persons living with epilepsy

As expected, level of social support towards epilepsy increased with the level of intimacy required in the relationship. While 73.8% of the respondents would definitely not feel ashamed if people knew someone in their family had epilepsy, only 16.5% would definitely not be unwilling to marry someone with epilepsy. 64.5% of respondents would not want to help someone having epileptic seizure because they believed that epilepsy can be contracted when one is in touch with the saliva of an epileptic person. 67.5% also revealed that they would be upset about working with person with epilepsy, 64.5% would not definitely stay in the same room with persons with epilepsy. Also 34% will definitely not have a person with epilepsy work in their home.

Earlier study in Nigeria in a university student population (Adewuya & Makanjuola, 2008) also revealed similar findings. Seventy-seven percent of the respondents would not want to marry someone with schizophrenia and 59% of university students would be unwilling to share a room with someone with mental illness. The present survey finds that 64.5% would be unwilling to share a room with someone with epilepsy.

In this study 57% of the respondents could be classified as having a poor social support towards people with epilepsy and thus is compared to a rate of 65.1% reported among university students in Nigeria (Adewuya & Makanjuola, 2008). The study revealed that good social support towards people living with epilepsy is particularly prominent amongst those living in the urban areas (52%), aged below 34years (46.3%), females (45.5%), singles (51.6%), Christians (53.2%) and those who had university education (63.3%).

This in line with the findings of Kabir and his colleagues (2009) which revealed that good social support towards people living with epilepsy is prominent among the urban dwellers (62.4%), aged below 40 years (57.2%), and those with tertiary education (47.4%). This position was also supported by Dietrich et al (2006) who posit that the more dangerous they believe the mentally ill are, the lesser the social support.

The study also revealed that those in rural area have lesser social support those in urban areas. This may be due to misconceptions that surround epilepsy which is more pronounced in the rural areas.

Respondents knowledge of management of epileptic seizure

Findings from this study showed that only few of the respondents (35.8%) had a good knowledge of managing epileptic seizure, 54.8% of the respondents had fair knowledge, while the remaining 9.5% had poor knowledge of managing epileptic seizure.

This is in line with the findings of Bagley (2007) from his study that assessed the level of knowledge of management of epileptic seizure among primary school teachers in South Africa. His findings revealed that majority of the respondents (47.5%) had a poor knowledge, 32.5% had a fair knowledge while 20% had a good knowledge of managing epileptic seizure. Also, findings from this study reveal that respondent with good knowledge of epilepsy have a higher percentage of positive attitudes (36.6%).

Association between Societal Attitudes towards People Living with Epilepsy and the Socio Demographic Characteristics

To analyze the association between societal attitude towards people living epilepsy and socio-demographic characterized of the respondents, the sample was dichotomized into those with positive attitude (n=172) and those with negative attitude (n=228). The differences in the groups were analyzed using chi-square (Table 7). The variables that were significantly associated with societal attitude include residency (p<0.012), age group (p<0.004), sex (p<0.020) and marital status (p<0.010). This is in line with the observation of Kabir et al (2009).

Also binary logistic regression was used to identify predictors of societal attitude. The socio-demographic variables which were significant on bivariate levels were assessed and it was found that, those who are married have six times chances of having positive attitude compared with being single. Respondents that were older also lower odds for having negative attitude than the younger ones. Females were more likely to show positive attitude than the male. Also those living in urban area found to have two chances of having positive attitude compared to those living in rural area.

Socio-demographic characteristics of respondents and their social support towards people living with epilepsy

To analyze the association between levels social towards people with epilepsy and the socio demographic characteristics of the respondents, the sample was dichotomized into those with good support (n=172) and poor social support (n=228). The differences in the groups were analyzed using chi square (Table 11). The variables that were significantly associated with levels of social support include residency (p<0.010), sex (p<0.030), educational status (p<0.020). This is in line with the findings of Jackie Lou (2008) and Bagley (2007).

Also binary logistic regression was used to identify the predictors of social support. The socio-demographic variables which were significant on bivariate levels were assessed and it was found that being a female and higher education qualification increase the chances to being a male and those with odds for giving support to persons with epilepsy compared to those living in urban areas.

CONCLUSION

In conclusion, this study has revealed that ignorance and illiteracy affect people's attitudes and social support towards people with epilepsy. And such attitudes are usually negative and stigmatizing. Therefore to make the society a better place for people with epilepsy, there is an urgent need for public education and enlightenment. The low level of knowledge and misconceptions found among the respondents demonstrates the need for educational programme aimed at demystifying epilepsy and mental illness.

Implication for Nursing Practice

According to the findings of this research, it was shown that most people have fair knowledge about epilepsy, but community attitude towards person with epilepsy is negative, this in turn affects societal support towards persons with epilepsy.

Proper and effective discharge of nurses' roles as advocate, counselor and educator will help increase community knowledge about epilepsy and help improve their attitude towards persons with epilepsy.

Nurses should health educate community members about causes, preventions, signs and symptoms, treatment and negative effect of stigmatization on the persons with epilepsy and community at large. If more information about epilepsy is given to people and the advantages of seeking professional help earlier, their knowledge will be improved, relapse will be prevented incidence of mental illness and stigmatization will be reduced.

Nurses should seek to provide facts about epilepsy in order to get rid of community held myths through health education. Home visitation should be embarked by public health Nurses to provide a human face on epilepsy and hopes that treatment works. Advocacy aims to hold back biased messages and challenges commonly held towards should be done by the Nurses.

Recommendations

In view of the major findings of this study, the following recommendations are hereby made:

- Health workers should improve more on educating their client and community members on epilepsy. There should also be mass education through every mean, which include distributing pamphlets, arranging public lectures/forums, organizing hotline and email services, and supporting television announcements and documentaries.
- Proper and effective management should be rendered to persons living with epilepsy and adequate follow up care should be done after discharge.
- Policy makers and non-governmental organization should organize and set up groups to campaign against stigmatization and health-educate community members in order to improve their attitude towards persons with epilepsy. Also Government should support by providing easily accessible community health care centres for mentally ill individuals.

Suggestions for further studies

Similar research should be carried out on using a multi-centered cross-cultural study that will encompass most of the ethnic groups in the West African Sub-region.

Limitations- The findings may not be generalized to other ethics groups in Nigeria. Although the Yorubas make up about $\frac{1}{3}$ of the Nigerian population, the views expressed may not necessary reflect the views of the other ethnic groups in Nigeria. There are several cultural differences across Nigeria and these may affect attitudes towards the person with epilepsy. However, there is a need for a larger scale, multi-centered cross-cultural study that will encompass most of the ethnic groups in Nigeria.

Also, the survey relied on self-report, which may have resulted in recall or report bias self-report data may also be affected by social desirability factors, in particular when investigating attitudes as with every other survey, the fact that participants may not be very accurate in answering the items on the instruments.

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