INTRODUCTION

The epilepsy (Greek - to seize) is a chronic of neurological disorder, characterized by seizure (Blume et al., 2001). Seizures are transient signs and/or symptoms of abnormal, excessive, synchronous neuronal activity in the brain (Fisher et al., 2005). Epileptic convulsions are expected to have negative consequences on the patient’s psychological and social life such as relationships, education and employment. About 50 million people worldwide have epilepsy, and nearly two out of every three new cases are discovered in developing countries (WHO, 2006). More than half of the epileptics had some sort of cognitive problems with abnormal behavioral manifestations (Rodin et al., 1977). Despite of advanced medical management with modern anti-epileptic drugs, more than 30% of patients continue to have drug-resistant epilepsy with frequent seizures (Kwan et al., 2010). Thus, an effective and safe therapy for epilepsy still remains a challenge and demand for new types of anti-epileptics still exists.

Natural plants have been a very much powerful source of drugs; particularly Indians have been using several plants, their parts and extracts as a medicine since Vedic days. According to WHO, 80% of world population, primarily those of developing countries rely on plant derived medicine for their healthcare. Even today, especially in rural India, people are still dependent on traditional herbal remedies for their primary health care. Therefore plants remain a rich source of discovery of new molecules and thus it has been exploited over decades for new drugs, to treat various diseases (Sarker et al., 2006).

Global scenario of epilepsy:

It is one of the most prevalent neurologic disorders with current estimates between 0.5 – 2% of the global population being affected (Naseer et al., 2009). It is estimated that in a given year in the US, there are 2.7 million people suffering from epilepsy (Kobau et al., 2008) with annual incidence of 44 per 100,000 persons (Hauser et al., 1993). Epilepsy is considered one of the most common neurological disorder with an incidence rate of 50-70 cases per 100,000 persons per year in most developed countries and a prevalence of 5 - 10 cases per 1,000 in a typical European population excluding cases of single seizures and febrile convulsions in children (Brodie et al., 1997).
Among the developing countries which have a higher incidence of epilepsy compared to developed ones, Latin America and several African countries proved to have a particular high incidence of epilepsy, possibly due to certain parasitic infections with brain involvement, perinatal brain damage or hereditary factors (Senanayake et al., 1993).

Among all seizure types, partial seizures - with or without secondary generalization (localisation-related epilepsies) - constitute the major type of seizures in all age groups (Sander et al., 1990). The prevalence of active epilepsy in the developed world ranges between 4 and 10 per 1000 of the population (Jallon, 1997). On the other hand, incidence of active epilepsy varies in developing countries, with ranges from 17 - 57/ 1000 in South America, 5.2 - 43/ 1000 in African countries and from 1.5 - 14 in Asia (Mac et al., 2007). An estimate of people with active epilepsy in Europe is approximately 3.1 million (based on a prevalence of 6/1000), excluding Russia, Belarus and Ukraine (due to sparse information on the epidemiology of epilepsy in a large population) while the expected number of new cases per year in Europe based on an age-specific rate is 311,000 (Forsgren et al., 2005).

National scenario of epilepsy:

Based on well accepted methods, valid screening and diagnosis tools, and case confirmation, it has been postulated to identify epilepsy in country in an inexpensive way in Indian region.
The prevalence of epilepsy varies from 2.5 to 1.9 per 1000 population (Gouri-Devi et al., 1987, Bharucha et al., 1987; Razdan et al., 1994; Kapoor et al., 1990; Das et al., 1996 & Mani et al., 1998). In Bangalore Urban Rural Neuroepidemiological Survey covering population 102,557 it was observed a prevalence rate of 8.8 per 1,000 populations, with the rate in rural community being twice that of urban area (Gouri-Devi et al., 1995; 1996; 1997 & 1999). Based on these data and information emanating from various studies, it is estimated that in India, there are 6-10 million people with epilepsy, accounting for nearly one fifth of the global burden (Gouri-Devi et al., 2003). In India it is estimated to have 60-80 lakhs of people suffering from epilepsy (Srinivas, 2010).

**Grand mal seizure:**

It also known as a tonic-clonic seizure — features a loss of consciousness and violent muscle contractions. It's the type of seizure most people picture when they think about seizures in general. Grand mal seizure is caused by abnormal electrical activity throughout the brain. In some cases, this type of seizure is triggered by other health problems, such as extremely low blood sugar or a stroke. However, most of the time grand mal seizure is caused by epilepsy. Many people who have a grand mal seizure will never have another one. However, in some people, daily anti-seizure medications are needed to control grand mal seizure (Wyllie et al., 2011)

**Antiepileptic Drugs (AEDs):**

It has been almost two decades since the introduction of the second generation AEDs. Most of these drugs have been studied in head to head comparisons either with placebo or with first generation agents. A limited number of studies have examined the efficacy and tolerability of newer AEDs either among other modern drugs or in comparison with older generation AEDs. It seems appropriate after two decades of their introduction to investigate how these drugs have influenced the outcome of epilepsy and to compare them against first generation AEDs as groups regarding their efficacy and tolerability (Wyllie et al., 2011 & James et al., 2009).