## Sudden unexpected death in epilepsy: The Cyprus experience in comparison with international data.

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Sudden unexpected death in epilepsy (SUDEP) affects 0.09-9.3 per 1,000 person-years depending on the population studied and constitutes the most common cause of death in people with epilepsy. This presentation will review epidemiological data of patients with SUDEP, identify possible risk factors in the population of our tertiary referral center and provide a review of the literature.

We performed a systematic review of patients with epilepsy who had died between 1997 and 2012 and identified those whose death circumstances met the definition of SUDEP. Information was collected regarding sex, age, type of seizures, anti-epileptic therapies, and circumstances of death. Ethical approval was obtained from the institutional medical ethics committee.

Four hundred and forty four new patients were diagnosed with epilepsy among referrals to the epilepsy clinic and were followed to the end of the study period. Seven patients, six males, were identified who met criteria for SUDEP. The average age was 30 years. All patients had had either primary or secondary tonic-clonic seizures. Most were on polypharmacy, and two had a Vagus Nerve Stimulator implanted. Most deaths were unwitnessed and nocturnal. The overall incidence rate for SUDEP in this population was 2.13 deaths/1000 person-years. Overall Cumulative Incidence (or lifetime risk) was calculated at 15.76 SUDEP deaths/1,000 patients.

In our series, SUDEP was primarily a nocturnal and unwitnessed event that affected primarily young males. Among both males and females patients, 36.8% of all deaths were due to SUDEP. The major risk factor identified was the occurrence of generalized tonic-clonic seizures signifying that every effort should be made to control this type of seizures.