

## Epilepsy Mortality in Wales: 2005-2017

Daniels, H<sup>1\*</sup>, Lacey, A<sup>1</sup>, Akbari, A<sup>1</sup>, Powell, R<sup>1</sup>, and Pickrell, O<sup>1</sup>

<sup>1</sup>Swansea University

### Background

Epilepsy is a common, chronic neurological condition that affects 50 million people worldwide. The risk of premature death in people with epilepsy is up to three times higher than for the general population making this disease a significant public health concern. In England, there are around 3,100 deaths associated with epilepsy each year; 49 per cent of these deaths are premature. The mortality of epilepsy in Wales in recent years is currently unknown.

### Main aim

To ascertain mortality figures for deaths associated with epilepsy in Wales.

### Method

We anonymously linked the Annual District Death Extract and the Welsh Demographics Service datasets within the Secure Anonymised Information Linkage Databank. Using ICD-10 codes for epilepsy, we identified all people who died with a mention of epilepsy on their death certificate, date of their death, and age at death between 2005 and 2017. Number of deaths per year were summed for each year. We also calculated the proportion of premature deaths and mean age at death for each year. All-cause mortality figures were collated as comparators.

### Results

During the study period, there were around 173 deaths associated with epilepsy in Wales each year. The proportion of epilepsy-associated deaths compared with all-cause deaths increased almost two-fold during this time. 54% of all deaths associated with epilepsy occurred under the age of 75 years, compared with 33 per cent of all-cause deaths. The mean age at death for people with epilepsy is 67 years; 11 years younger than all-cause deaths (78 years).

\*Corresponding Author:

Email Address: [h.daniels@swansea.ac.uk](mailto:h.daniels@swansea.ac.uk) (H Daniels)

### Conclusion

The number of deaths associated with epilepsy is increasing every year in Wales. These figures also show that having epilepsy reduces life expectancy. More research is needed into the causes of epilepsy-associated deaths to inform policy and improve outcomes for this patient group.

