

## Significant Under-reporting of Diabetes Foot Disease on UK Death Certificates: Evaluation of a Diabetes Foot Clinic Cohort

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**Introduction and Objective:** Accurate death certificate (DC) information is important as it informs Public Health policy, determines allocation of appropriate resources and allows monitoring the impact of efforts to improve survival outcomes. The recording of Diabetes on DCs has long been poor, which contributes to an underestimation of Diabetes-related mortality. Mortality of patients with active Diabetes Foot disease is twice as high as that of Diabetes alone and hence this study aimed to determine the frequency of Diabetes Foot disease documentation on DCs. **Design and Method:** A retrospective evaluation of all recorded causes of death that occurred in a cohort of patients from our Diabetes Foot clinic over the subsequent 18 month observation period. DCs were obtained from the Local and National Death Registry Offices. Data were analysed with descriptive statistics. **Results:** Of 597 patients followed up, 56 (9.4%) died during the observation period. Of those, 89% had type 2 Diabetes and 11% type 1 Diabetes; the mean duration of Diabetes was  $20\pm 9.9$  years and  $45\pm 12.9$  years, respectively. The primary cause of death was cardiac disease in 41%, pneumonia 19%, malignancy 12%, multi-organ failure 10%, stroke 6% and 'others' 12%. Diabetes Foot disease appeared on only 18% of DCs and exclusively as a contributing factor (10% as 'foot ulcer' and 8% as 'peripheral vascular disease'). Diabetes was documented in only 70% of certificates, hypertension in 30% and renal disease in 14%. Most deaths occurred in hospital (62%), 28% at home, and 10% in a nursing home or hospice. All patients who underwent a post mortem ( $n=13$ ) had coronary heart disease confirmed as primary cause of death. **Conclusion:** There is very significant under-reporting of Diabetes Foot disease on DCs and, to a lesser extent, of Diabetes generally. Clinicians looking after patients with active Diabetes Foot disease need to be aware of its particularly close association with mortality and give full attention to all other cardiovascular risk factors to improve survival. Enhanced recording would help raise awareness of Diabetes Foot disease at Public Health level and support the calls for adequate resources.