

Mortality and causes of death among HIV patients in Brighton & Hove 2017-2020

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Background

- In 2017, Brighton & Hove became a Fast Track City, providing enhanced political and clinical commitment to achieving 'Getting to Zero' targets by 2030
- The focus of this audit was to determine progress toward the getting to 'zero AIDS-related deaths' target, as well as understand the proportions of other potentially preventable causes of death¹
- Of the Brighton HIV clinical cohort 92% are male, x% white (UK/non UK) and 54% are over 50 years of age
- Since 2013, HIV deaths in London have been audited annually by the London HIV Mortality Review Group²
- We present the results of the first audit of HIV deaths in Brighton & Hove, from 2017 to 2020
- The results will assist with the rollout of the National HIV Mortality Review

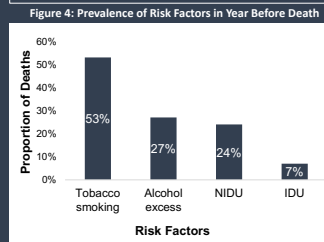
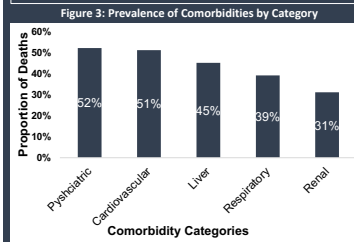
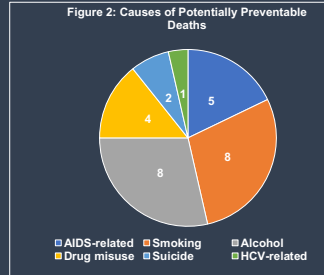
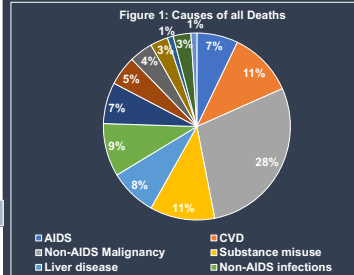
Methods

- Multiple sources of information were explored including hospital notes, HIV clinic electronic patient records, archived HIV paper notes, laboratory results database, consultants involved in the care, Cause of Death in HIV (CoDe) forms, GP and hospice records, and coroner reports, where applicable
- Data was entered onto the PHE/BHIVA online reporting form including: lifestyle risk factors, co-morbidities, cause of death, ART use and clinical markers, end of life care
- Potentially preventable deaths were categorised as:

HIV-related, due to:	Not HIV-related, due to:
<ul style="list-style-type: none"> AIDS-defining illness <1 year since diagnosis Vaccine-preventable 	<ul style="list-style-type: none"> Risk factor-related Vaccine-preventable Suicide HCV-related

Results

- There were 75 deaths in total across the four years
- Deaths were predominantly in males (92%; 69/75)
- Cause of death was ascertained for 89% (74/75) of people (Figure 1). One death had inconclusive autopsy findings
- 37% (28/75) of deaths were potentially preventable (Figure 2):
 - 6% (5/75) were directly HIV-related deaths: median age 41 (r 40-73)
 - 31% (23/75) were not directly HIV related: median age 54 (r 34-77)
 - 63% (47/75) were not potentially preventable: median age 61 (r 23-89)
- All except one (74/75; 99%) had one or more comorbidity (Figure 3); the most common was mental illness, (52%; 39/75), of which three quarters had depression
- 67% (50/75) of people had at least one lifestyle risk factor in the year before death overall (Figure 4), rising to 71% (20/28) among those with potentially preventable deaths
- Nine patients (12%) were known to have poor ART adherence in the year before death; 9 (12%) were not virally suppressed at death



Discussion and Conclusions

- The vast majority (94%) of people living with HIV in Brighton & Hove did not die from HIV, indicating local services have been largely successful in detecting cases and ensuring they remain engaged in care
- Adherence to ARVs was lower in this group, with lower levels achieving undetectable virus (88%) compared to the overall cohort (99% <40 copies/ml)
- There were a substantial number of otherwise potentially preventable deaths from non-AIDS causes, possibly in part due to a higher prevalence of risk factors than the general population, compounded with the impact of HIV infection^{3,5}
- Comorbidities were common, particularly depression and cardiovascular disease
- Regular clinical visits provide opportunities to monitor and review medications and clinical markers. However, these meetings also act as a gateway to advocate for healthy lifestyles, providing support and referrals where necessary to help reduce the impact of smoking, substance misuse, and comorbid conditions
- We have a responsibility to reduce all potentially preventable deaths and by targeting those due to lifestyle factors and comorbidities, we may be able to significantly reduce all-cause premature mortality among people living with HIV in Brighton & Hove

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