All-cause hospitalisation according to demographic group in people living with HIV in the current ART era: Recent findings from a cohort study in the UK

Summary:

People with HIV can now live long and healthy lives thanks to current treatment. As people with HIV live for longer, illnesses associated with older age will become more common. We need to ensure that all people with HIV remain well and equally benefit from HIV treatment. One way of assessing health is to look at the frequency of hospital admissions (stays for one night or more).

Our study looked at rates of hospital admissions in recent years, and compared whether they was similar between gender, sexuality and ethnicity groups.

We used data from 4207 individuals in the Royal Free HIV Cohort study between 2007 and 2018. Individuals were classified into five groups. We used a standard classification, used by Public Health England:

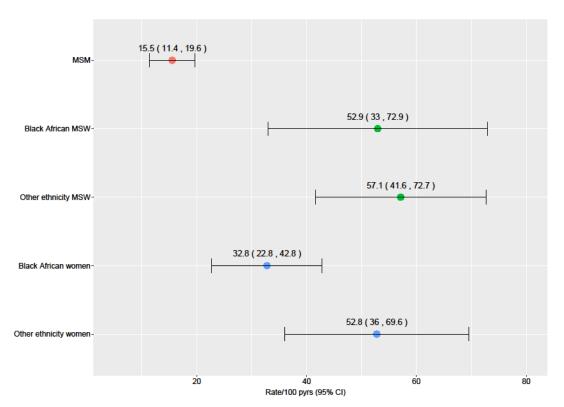
- (i) Gay and bisexual and other men who have sex with men (MSM)
- (ii) Black African heterosexual men
- (iii) Heterosexual men of other ethnicity,
- (iv) Black African women
- (v) Women of other ethnicity.

As the hospitalisation rate is considerably higher in the first year after people are diagnosed with HIV, we studied this first year separately.

First year after HIV diagnosis:

The hospitalisation rate was 30.7/100 person-years, meaning that approximately 30% of people were hospitalised in the first year after they were diagnosed. 52% of admissions were for AIDS-related illnesses. The graph below shows how this rate differed between the five groups. Hospitalisations were least common in the MSM

group. They were twice as common in black African women. They were more than three times as common in heterosexual men and women of ethnicities other than black African. These differences reflected the fact that the MSM group had higher CD4 counts. In other words, their immune system was in better shape, probably because they were diagnosed more promptly.

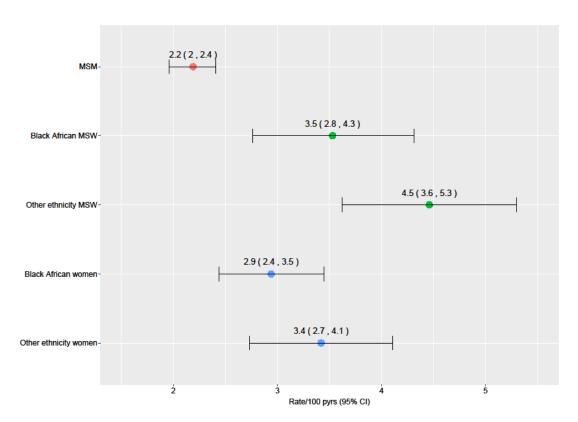


Graph 1: Hospitalisation rates and 95% confidence intervals in the first year after HIV diagnosis. MSM=gay, bisexual and other men who have sex with men; MSW=heterosexual men who have sex with women.

Second and later years after HIV diagnosis

The hospitalisation rate in the second and later years after HIV diagnosis was much lower. It was 2.7/100 person-years, roughly the same as a 3% chance of being hospitalised each year.

13% of admissions were for AIDS-related illnesses. The graph below shows how this rate differed between the five groups. The pattern was similar to that seen in the first year after diagnosis.



Graph 2: Hospitalisation rates and 95% confidence intervals in the second and later years after HIV diagnosis. MSM=gay, bisexual and other men who have sex with men; MSW=heterosexual men who have sex with women.

Conclusions: The rates of hospitalisation among people with HIV are very different across the main groups of people affected by HIV. This is true both in the first year after HIV diagnosis and after this time. More work is needed to investigate why, and to try to reduce these inequalities.

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