

# WHAT ARE THE PREDICTORS OF PROGRESSION OF MULTIMORBIDITY AMONG PEOPLE WITH HIV? A LONGITUDINAL OBSERVATIONAL COHORT STUDY IN NORTHERN NSW

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## Background:

With viral load suppression exceeding set targets and effective antiretrovirals widely available, the progression of morbidity in people with HIV (PWH) has become an important marker for quality of care in this population. This study aims to determine which factors can predict the progression of multimorbidity in PWH.

## Methods:

PWH who attended the northern region of the North Coast Sexual Health Services were recruited between 1 January 2017 and 1 March 2020 and consented to have their data collected in an observation cohort study. Along with demographic data, and laboratory results, a previously validated multimorbidity scale, the Cumulative Illness Rating Scale (CIRS) was collected at enrolment and first clinical review of every subsequent year. PWH were categorised as having progression if CIRS score increased from baseline. Associations with progression were determined through  $\chi^2$  test for proportions, and Mann-Whitney U test for variables that are not normally distributed. Data analysis was conducted using SPSS. Ethics approval was obtained from NCNSW HREC, LNR 143, 8/8/2016.

## Results:

Of the 186 people examined in this initial analysis, 92 (49.5%) had progression of multimorbidity and 94 (50.5%) did not. PWH that were born overseas were less likely to progress than those born in Australia (27.8% vs 54.7%  $\chi^2=8.4$ ,  $p=0.004$ ). Median baseline CIRS scores were lower in progressors than non-progressors (6.5 vs 8,  $U=3503$ ,  $p=0.025$ ). Multimorbidity progression was not associated with specific baseline conditions, model of care or other demographics. Further analysis is planned to control for confounding and explore associations with specific antiretrovirals.

## Conclusion:

Progression of multimorbidity of PWH is associated with lower baseline multimorbidity, as well as being Australian born.

## Disclosure of Interest Statement:

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