

Prevalence of non-communicable diseases in adults living with Human Immunodeficiency Virus: an overview of systematic reviews.

Student: Shahista Mustafa Jaffer

Supervisor: Prof Young

Background: Non-communicable diseases (NCD's) are on the rise in patients with HIV and this has been partly attributed to the increasing use of Antiretroviral therapy (ART). Our aim was to consolidate findings on prevalence of NCD in those with HIV, from systematic reviews, to inform the existing body of research and provide evidence to inform planning of healthcare services.

Methods: We undertook a comprehensive search in February 2018, with no date limitations, in 7 databases to identify systematic reviews on the prevalence of NCD's in HIV patients on ART. We included systematic reviews with participants over the age of 13years who were on ART and had one or more of the specified NCD's including diabetes mellitus type 2, hypertension, dyslipidemia and depression. We then assessed the quality of these systematic reviews using the AMSTAR 2 tool and extracted prevalence's of the NCD's from each one of them.

Results: We identified 10 systematic reviews meeting our inclusion criteria of which 3 are ongoing. The methodological quality of the seven systematic reviews assessed varied in many aspects. Only one systematic review assessed prevalence of multi-morbidity defined as the presence of two or more NCD's in people living with HIV (PLHIV) which ranged from 8.4% to 47%, the remaining six only assessed the prevalence of comorbidity of any one NCD in PLHIV. Diabetes mellitus type 2 had the lowest prevalence especially in African countries and it ranged between 7% to 48.6% globally while dyslipidemia had the highest prevalence globally ranging from 6.3% to 100%. Depression in PLHIV who were on ART was considerably high ranging from 25.81% to 64% while hypertension ranged from as low as 4.0% to as high as 67.0%.

Conclusions: This overview highlights that NCD's are highly prevalent in PLHIV on ART. There is a lack of systematic reviews and primary studies focusing on multi-morbidity in the HIV population on ART. PROSPERO registration number - CRD42018104420