PhD defence Diana Huis in 't Veld

Lifestyles in persons with HIV in low income countries

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Dit is de omschrijving

Supervisor

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Summary

By the end of 2018 there were almost 38 million people living with HIV (Human Immunodeficiency Virus) and 1.7 million people became newly infected in 2018 globally. HIV has claimed more than 32 million lives so far. In 2018 770,000 people died from HIV-related causes globally. The African region is the most affected, with almost 26 million people living with HIV in 2018. Major advances have been made in HIV-care over the years, transforming it from a deadly disease into a chronic disease. The life expectancy of people living with HIV comes close to people who do not have HIV, at least in high resource settings (HRS). Many resource limited settings are going through a transitional phase, whereby people adopt a more “Western” way of living. Currently there is a persistence of the ‘old’ situation with the emergence of the ‘new’ situation, posing specific challenges. In HRS numerous studies have been performed concerning risk factors which emerge with the urban-industrial lifestyles of persons with HIV.
In a randomized trial, we studied the efficacy of a brief intervention aiming to reduce alcohol use based on the Information-Motivation-Behavioural Skills Model in persons with HIV with high alcohol use. The intervention consisted of a brief counseling session; the control group received a health education leaflet. The study was conducted in three outpatient HIV clinics in Pretoria in South Africa. HIV care is provided free of charge in these clinics. Baseline data of the 2230 patients (66.5% women, median age of 37 years (IQR 31-43)) showed a high prevalence of poverty related characteristics. In almost half of the patients their main income came from family contributions or social grants. One third of male patients were in WHO clinical stage 3 or 4, underweight was present in almost 20% of men and the CD4 cell count at antiretroviral therapy (ART) initiation was very low (median 166 cell/µL). Fifty-five percent of men and 41% of women had a history of tuberculosis and one in 7 patients was receiving tuberculosis treatment. Almost 90% of patients was on ART with almost 80% having an ART adherence rate of at least 95%. In the same study we found a high prevalence of ‘Western’ lifestyle related characteristics such as high levels of alcohol- and tobacco use (mostly in men) and a high prevalence of overweight, obesity and increased waist circumference (mostly in women). Overweight and obesity were associated with a higher quality-of-life score, making weight reduction interventions challenging.
High risk drinking was associated with a higher prevalence of tobacco use, with not being on ART, with a detectable HIV viral load, with a lower last-measured CD4 cell count, with non-adherence, with higher depression scores, with lower quality-of-life and health satisfaction scores. Therefore, routine screening for alcohol use should be introduced in these clinics and harm reduction interventions should be implemented.
The brief intervention was not successful at reducing alcohol use both 5 and 12 months after the intervention. However, there was a beneficial effect on reported hazardous- or harmful alcohol use over a short term follow up period in both study arms. To sustain an effect, most likely repetitive contacts with hazardous- or harmful alcohol drinkers will be needed during a long follow up period.
We also used the Epidemiologic Databases to Evaluate AIDS (IeDEA) database to investigate differences in body weight among persons with HIV infection with and without ART from Southern-, East-, West- and Central African and the Asia-Pacific regions. This data set included information on 205,571 patients. It showed that mean adjusted body weight change in the first 12 months was higher in patients started on tenofovir and/or efavirenz; in patients from Central-, West- and East- Africa, in men, and in patients with a poorer clinical status. In the second year of ART it was greater in patients initiated on tenofovir and/or nevirapine, and in patients not on stavudine, in women, in patients from Southern Africa and in patients with a better clinical status at initiation of ART. Stavudine in the initial regimen was associated with a lower mean adjusted body weight change and with weight loss in the

second treatment year.
This co-occurrence of characteristics of lifestyles of resource limited settings and ‘Western’ lifestyle in persons with HIV poses major challenges in situations whereby basic health care services are still weak and new health risk factors call for an additional and new approach in recognizing, preventing and halting them. This is a major task for settings which are already compromised due to financial, logistic, educational and staffing issues.
Given the limited resources and the fact that the healthcare systems in many countries are overwhelmed, solutions should be cheap, easy to apply, without taking too much time per patient. Most importantly health education programs should be developed, implemented and scaled up to promote a healthy lifestyle.