
Poster presentation

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How Does Health-Related Quality Of Life Relate To Symptoms Experience In HIV Patients Treated With Highly-Active Antiretroviral Therapy?

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Objectives
Health-related quality of life (HRQL) is modulated by the type and frequency of symptoms experienced in daily life. Such a relationship is likely determined in part by treatment regimen and health care system. We studied how symptoms reported by HIV patients under PI- vs. NNTI-based HAART relate to different HRQL dimensions on the PROQOL-HIV questionnaire.

Methods
N = 424 HAART patients (41 ± 10 yrs., 36% females, 8 countries: USA, Australia, France, Senegal, China, Thailand, Cambodia, Brazil), without comorbidity, completed a 31-symptom HIV checklist (presence/absence) and the PROQOL-HIV questionnaire. Hierarchical cluster analysis helped to study the structure of symptoms experienced in patients under PI (N = 242) or NNTI (N = 182) regimen. Canonical correlation analysis (CCA) was used to uncover the relationships between symptoms and HRQL dimensions, and between-country variations. The PROQOL-HIV questionnaire includes 43 items covering eight dimensions: Physical Health and Symptoms (PHS, 9 items), Treatment Impact (TI, 10), Emotional Distress (ED, 4), Health Concerns (HC, 4), Body Change (BC, 4), Intimate Relationships (IR, 3), Social Relationships (SR, 2), Stigma (ST 2). It has been shown to meet standard psychometric criteria (Duracinsky et al. JAIDS, submitted).

Results
Hierarchical cluster analysis showed that a common group of symptoms related to body fat (lipodystrophy) and weight changes was shared by patients across treatment regimens (see 3rd cluster for the NNTI group and last cluster for the PI group, starting from the left in Fig. A). The number of clusters was selected by looking at the resulting dendrogram, but silhouette width and the gap statistic were used to assess its consistency. The frequency of some side-effects—sleep disturbance, headache, diarrhea, nausea, fatigue and pain—was higher with PI regimens (Fig. B), while specific patterns of symptoms associations were found in both groups (Fig. C).

Conclusions
Treatment-related symptoms aligned with PROQOL-HIV dimensions and known differences between countries. The use of CCA as an exploratory multiple endpoints model helped to unravel complex relationships between symptoms and HRQL facets. The choice of treatment strategies should rely not only on symptoms experience, but also account for their relations to HRQL in light of varying access to care.