## Review Article

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## **Abstract**

This short communication article was intended to update the literature on quality of life (QoL) or Health-related quality of life (HRQoL) among people living with HIV/AIDS (PLWHA). QoL evaluation was recommended for a holistic assessment of impact of disease and treatments in PLWHA. Many generic and disease-specific self-report instruments are available, including Medical outcome study measures which were reported for their reliability and validity, and available in multiple languages for use. Some treatments like anti-retroviral therapy, exercise therapy, nutritional therapy were shown to improve QoL in PLWHA.

**Keywords:**Quality of life, biopsychosocial model, Psychoimmunology, Communicable disorders, HIV/AIDS.

This short communication article was intended to update the literature on quality of life (QoL) or Health-related quality of life (HRQoL) among people living with HIV/AIDS (PLWHA).

Robberstad and Olsen¹ performed a systematic review of the literature on HRQL for people living with HIV/AIDS in Africa and used focus group discussions in panels of clinical AIDS experts to test the preference based on a generic descriptive system EQ-5D. The authors also contrasted quality of life with and without antiretroviral treatment (ART), and with and without treatment failure. Four papers were on HRQL weights out of a total eight studies which were based on generic health profiles. "Most of the available literature (20 papers) utilized disease specific instrument, which are not applicable for economic evaluation. The focus group discussions revealed that HRQL weights are strongly correlated

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to disease stage. Furthermore, clinical experts consistently report that ART has a strong positive impact on the HRQL of patients, although this effect appears to rebound in cases of drug resistance."

Symptom-focused HRQoL

Webb and Norton<sup>2</sup> described the role of nurses in HRQOL assessment in HIV/AIDS, compared commonly used assessment tools, and evaluated the applicability of these tools for routine clinical use in this patient population. Such a routine clinical evaluation of health-related quality of life (HRQOL) improved quality of care in patients with HIV/AIDS by effectively assessing and optimizing treatment outcomes, enhancing patient adherence, improving communication between patients and clinicians/ nurses, and documenting changes in patients' health status over time. There is need for new, user-friendly, HIV-specific clinical assessment tool that briefly but effectively evaluates symptom-related HRQOL issues most relevant to patients with HIV/AIDS, including fatigue, depression, pain, nausea and vomiting, sleep disturbances, sexual dysfunction, and body image changes.

# Health-related quality-of-life measures

Claysonet al<sup>3</sup> reviewed existing HR-QOL measures reported in the HIV/AIDS literature to identify those for use in clinical trials. Three generic and six HIV-targeted measures were found and the study concluded that each of the generic measures (i.e. Medical Outcomes Study [MOS] 36-Item Short Form Survey Instrument [SF-36], EQ-5D, Health Utilities Index [HUI]) serve as a useful adjunct to an HIV-targeted measure in a trial. The Functional Assessment of HIV Infection (FAHI) and MOS-HIV

health survey were identified to be the two most appropriate HIV-targeted measures.

# Health-related quality-of-life measurements

Tsasis<sup>4</sup> reviewed studies on different types of HRQL measurements to identify a comprehensive set of measures that allow one to examine the more diffuse impact of the illness on activities of daily living within the social, physical, mental, and existential domains.

# Medical Outcomes Study HRQoL measures

Wu et al<sup>5</sup> listed the characteristics of Medical Outcomes Study (MOS) HRQoL measures including the SF-20, MOS-HIV, SF-36, SF-12, SF-56, SF-38 (Patient Reported Status and Experience Survey (PARSE)), SF-21 and HIV Cost and Service Utilization Study (HCSUS) questionnaires as follows: "The instrument length ranges from 12 to 56 items, covering two to 11 dimensions. Completion requires from 2 to 14 minutes. Subscales are scored on a 0-100 scale (a higher score indicates better health); physical and mental health or overall summary scores are available for most of the measures. Three of the instruments are available in multiple languages. The instruments have been administered to over 20,000 persons with HIV in descriptive studies and clinical trials and there is substantial evidence for their reliability, construct and predictive validity and responsiveness. In several studies the measures have shown important differences between treatments."

## Spirituality

Dalmida<sup>6</sup> reviewed the literature on depression among HIV-positive women and described the positive associations reported between spirituality, mental health, and HRQOL. The authors presented a case example and recommended the incorporation of spirituality into traditional mental health practices so that we can optimize healthcare for HIV-positive women who are diagnosed with depression.

## Adherence to antiretroviral treatment (ART)

Bader et al<sup>7</sup> examined relationships between types of adherence and coping, psychosocial factors, quality of life (QoL), and physical symptoms in 100 HIV-positive participants. The study had following findings; "QoL was worse in participants with more physical symptoms and in those seeking mental health care. Four adherence types were identified: 'Traditional Adherence' (with indifferent, faithful,

and anxious subtypes), 'Traditional Non-Adherence', 'Critical Adherence', and 'Critical Non-Adherence'.

# Economic outcomes of ART

Beard et al<sup>8</sup> conducted a systematic literature review to analyze the effect of ARTon quality of life, mental health, labor productivity, and economic wellbeing, and found 21 publications, including 14 full-length articles, six abstracts, and one presentation (representing 16 studies). Studies reported that patients on ART had improvements in physical, emotional and mental health, and daily function, with changes in work performance and absenteeism, but information on effects on QoL was limited.

# Exercise training

Ciccoloet al<sup>9</sup> explained that exercise was listed as one of the most popular self-care therapies and a small number of studies reported the positive impact of exercise on the most common self-reported symptoms of HIV and AIDS and the adverse effects of ART treatment.

#### Nutritional support

Suttajit<sup>10</sup> listed nutritional problems in PLWHA such as malnutrition, wasting syndrome, and oxidative stress, which contribute to health and death in HIV+/AIDS patients. "Weight loss, lean tissue depletion, lipoatrophy, loss of appetite, diarrhea, and the hypermetabolic state increase the risk of death. The serum antioxidant vitamins and minerals decrease while oxidative stress increases during AIDS progression. The optimization of nutritional status, intervention with foods and supplements, including nutrients and other bio-active food components, are needed to maintain the immune system. Probiotics or lactic acid bacteria and prebiotics are sometimes given on the presumed basis that they help maintain integrity of mucosal surfaces, improve antibody responses and increase white blood cell production."

QoL evaluation was recommended for a holistic assessment of impact of disease and treatments in PLWHA. Many generic and disease-specific self-report instruments are available, including Medical outcome study measures which were reported for their reliability and validity, and available in multiple languages for use. Some treatments like anti-retroviral therapy, exercise therapy, nutritional therapy were shown to improve QoL in PLWHA.

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