



## Measuring quality of life among people living with HIV: a systematic review of reviews

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### Background

- Health-related quality of life (HRQoL) is a multidimensional construct concerned with the impact of health on a person's perception of their wellbeing and level of functioning in important areas of their life [1]
- Improving HRQoL is central to the treatment, care and support of PLWH. This requires valid, reliable and responsive tools.
- The aim of this systematic of reviews was to identify brief, validated, pragmatic tools for the assessment of HRQoL in HIV interventions and routine clinical care

### Method

#### Systematic review of reviews

- Conducted using published guidance [2, 3]

#### Search terms

(HIV OR human immunodeficiency virus OR antiretroviral\*) AND (quality of life OR QOL OR PROM or patient reported outcome) AND (measure\* OR inventor\* OR scale\* OR questionnaire\* OR self-report\* OR assessment\* OR survey or tool\* or indicator\* or instrument\*) AND review

#### 1. Selection of reviews

- Search of online databases (Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effects, Medline, PsycINFO) and reference lists

#### Inclusion criteria

- Review of tools used to measure HRQoL in PLWH
- Review used a systematic search strategy

#### Exclusion criteria

- Review of tools used to measure HRQoL in children/adolescents
- Review published prior to 2000
- Conference abstract
- Focused on HRQoL in relation to a specific comorbidity/treatment side effect
- Quality criteria [4] applied by two researchers

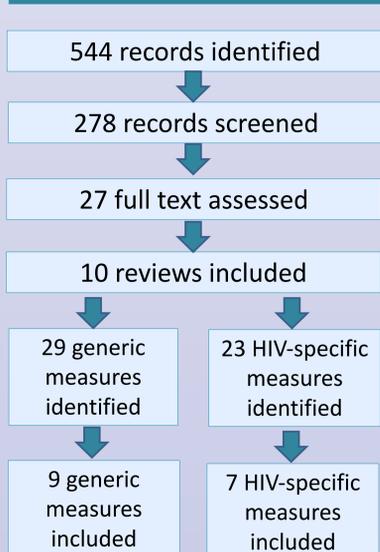
#### 2. Selection of HRQoL measures

HRQoL measures selected from reviews based on:

- **CONTENT** - Coverage of at least 3 HRQoL domains: physical function, social/role function and mental health
- **PRACTICALITY** – Measures that can be self-administered and completed within 10 minutes
- **NORMATIVE DATA** – for *generic* measures the availability of normative data was required
- **PATIENT INPUT** – for *HIV-specific* measures patient input into the development of items was required

### Results

#### Selection of reviews and scales



#### Qualities and psychometric properties of the selected generic and HIV specific HRQoL measures extracted from the reviews

Generic measure	No. items	Domains	V	Rel	Res	F/C	Conclusions of the reviews
COOP-WONKA	6-9	Physical, social, feelings, change, daily activities, overall health	Y	NS	NS	NS	NS
EQ-5D	5	Mobility, self-care, usual activities, pain, anxiety/depression, self-reported health	Y	NS	Y	N	Useful to obtain utility measures [5] Use alongside HIV-specific measure [1] Limitations with asymptomatic HIV [1]
FLZM	16	Satisfaction with life in general; health satisfaction	NS	NS	NS	NS	NS
Health Utilities Index 2/3	15	Vision, ambulation, dexterity, emotion, cognition, hearing, speech and pain	Y	NS	Y	NS	Potentially useful adjuvant to HIV-specific measure [1]. Less evidence than EQ-5D/SF-36 [1]
McGill QOL	16	Physical, psychological, existential, support	Y	Y	NS	NS	NS
SF-12	12	Physical, role, pain, general health, vitality, social, mental health	NS	NS	Y	N	Recommended when the length of SF-36 is a problem [1]
SF-20	20	NS	NS	Y	NS	Y	NS
SF-36	36	Physical, role, pain, general health, vitality, social, mental health, health transition	Y	Y	Y	N	More evidence than other generic measures [1,6] Use with HIV-specific measure [1]. Cross-cultural limitations [7]
WHOQOL-BREF	26	Physical, psychological, social, environment	Y	Y	NS	NS	Conceptual and semantic equivalence across countries [7]

V = evidence of validity; Rel = evidence of reliability; Res = evidence of responsiveness; F/C = absence of floor and ceiling effects; Y = yes; NS = not stated

HIV-specific measure	No. items	Domains	V	Rel	Res	F/C	Conclusions of the reviews
ACTG SF-21	21	Physical, energy/fatigue, social, role, cognition, pain, health perception, emotional health	NS	NS	NS	NS	NS
HIV-QL31	31	Sex-life, pain, psychological, relationships, limitations caused by HIV, symptoms, impact of treatment/care	Y	Y	NS	NS	Relatively sound and useful. Developed with PLWH. May be culture-specific [8]
MQOL-HIV	40	Mental and physical health/functioning, social support, cognitive function, financial status, partner intimacy, sexual functioning, perceived access to medical care	Y	Y	Y	N	Relatively sound and useful. Developed with PLWH. May be culture-specific [8]
PROQOL-HIV	43	Physical health, symptoms, treatment impact, emotional distress, health concerns, body change, intimate and social relationships, stigma, religious beliefs	NS	NS	NS	NS	NS
MOS-HIV	35	Physical and mental health, pain, social, role, emotional wellbeing, energy/fatigue, cognitive functioning, health distress, health transition, general health, overall QOL	Y	Y	Y	N	Well established validity/reliability but concerns of limited scope [6], relevance [1] and cross-cultural applicability [7]
WHOQOL-HIV BREF	31	Physical, psychological, level of independence, social, environmental and spiritual QOL	NS	NS	NS	NS	NS
HIV-SQUAD	24	Physical, and psychological domains, symptoms, adherence	Y	M	Y	NS	NS

V = evidence of validity; Rel = evidence of reliability; Res = evidence of responsiveness; F/C = absence of floor and ceiling effects; Y = yes; NS = not stated

### Conclusions

- Of the generic measures the EQ-5D, SF-36 psychometric data in the reviews supported the EQ-5D and SF-36
- Of the HIV specific measures the MOS-HIV was supported by psychometric data but there were concerns about limited input from PLWH into item development, cross-cultural relevance applicability in the ART era
- More recently developed measures, the WHOQOL-HIV BREF and PROQOL-HIV were identified but limited psychometric data were available in the reviews. Both were developed with extensive input of PLWHIV, have been validated across cultures [8,9] and may prove psychometrically sound alternatives to the MOS-HIV
- Conclusions are limited by data available in the included reviews. New measures and more recent data may be available.

#### References

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