

## **ABSTRACT**

## A systematic literature review of quality of life among people living with HIV/AIDS in China

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**Objective:** This study aims to systematically characterize the health-related quality of life (HRQoL) among people living with HIV/AIDS (PLWHA) in China.

**Methods:** The systematic literature searching was conducted from database establishment until June 28 2023 (PubMed, Embase, ISPOR, CNKI, Wanfang, and VIP Database), and health utility values were estimated using mapping algorithms.

**Results:** 11,290 literatures were screened, of which 290 met the eligibility criteria without PLWHA restriction and covered 18 different scales. Inclusion criterion: (1) Studies investigating Chinese PLWHA, (2) Studies that utilize multi-dimensional HRQoL scales, (3) Sample size ≥100 participants, and exclusion criterion: (1) Studies not targeting on Chinese PLWHA, (2) Studies utilizing unspecified or undefined scales, (3) Studies in which the scale scores for different domains were not reported, (4) Non-research materials (editorials, correspondences, theses, *etc.*, (5) Duplicate studies. Analysis was based on 179 studies with the most frequently used top 3 scales, including the 36-item short form survey (SF-36) in 64 (22%) studies, World Health Organization Quality of Life Questionnaire for HIV Brief Version (WHOQOL-HIV-BREF) in 58 (20%) studies, and medical outcomes study HIV health survey (MOS-HIV) in 57 (20%) studies.

The 179 studies were published between 2007 and 2023. 13 studies started since 2020 after COVID-19 outbreak. 122 were non-interventional studies and 57 were prospective interventional controlled trials. 137 out of 159 studies where gender information was available reported a higher proportion of male participants. Only 3 studies published before 2020 specified the treatment regimens, all included in the National Free Antiretroviral Treatment Program (NFATP) and none was targeting integrase strand transfer inhibitor (INSTI).

Across these 3 scales, non-interventional studies consistently indicated lower HRQoL in PLWHA compared to the general population, while in prospective trials it indicated HRQoL improvements through interventions like nursing care, management strategies and highly active antiretroviral therapy.

Median utility values estimated from the MOS-HIV were 0.81 and 0.78, respectively, based on two mapping algorithms. Subgroup analyses indicated lower utility in AIDS patients compared to HIV-infected individuals, with differences ranging from 0.01 to 0.09 across various studies using different mapping algorithms. Both groups were associated with lower utility than that in general population in China.

**Conclusion:** The overall HRQoL among Chinese PLWHA is worse than the that in general population, emphasizing the urgent need for effective treatment strategies to improve the HRQoL for PLWHA.

Key words: people living with HIV/AIDS, quality of Life, China, systematic literature review

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