Associations between HIV stigma and health-related quality of life among people living with HIV in Zambia and South Africa: cross-sectional analysis of data from the HPTN 071 (PopART) study.

PCR 134

Emily Hall[1], **Katherine Davis (k.davis18@imperial.ac.uk)[1],** Julius Ohrnberger[1], Michael Pickles[1], Simon Gregson[1], Ranjeeta Thomas[2], James R Hargreaves[3], Triantafyllos Pliakas[3], Justin Bwalya[4], Rory Dunbar[5], Tila Mainga[3,4], Kwame Shanaube[4], Graeme Hoddinott[5], Virginia Bond[3,4], Peter Bock[5], Helen Ayles[3], Anne Stangl[6], Deborah Donnell[7], Richard Hayes[3], Sarah Fidler[3], Katharina Hauck[1] for the HPTN 071 (PopART) study group

[1]Imperial College London, London, UK, [2]London School of Economics, London, UK, [3]London School of Hygiene and Tropical Medicine, London, UK, [4]University of Zambia, Lusaka, Zambia, [5]University of Stellenbosch, Cape Town, South Africa, [6]Hera Solutions, Baltimore, USA [7]Fred Hutchinson Cancer Research Center, Seattle, USA

BACKGROUND

- The life expectancy of people living with HIV has risen considerably as result of access to treatment.[1]
- However, people living with HIV often report lower health-related quality of life (HRQoL) than people who are not living with HIV.[2]
- Stigma related to HIV status may impact HRQoL, but little is known about the relationship between the two.[3]
- **We used data from the HPTN 071 (PopART) study to explore associations between HIV stigma and HRQoL among people living with HIV.**

METHODS

- HPTN 071 (PopART) was a cluster randomized controlled trial in 21 urban and peri-urban communities in Zambia and South Africa (Fig. 1). A population cohort of randomly selected adults (18-44 years) in randomly selected households was recruited and surveyed at baseline and 36 months.
- HRQoL was measured using the EuroQol-5-dimensions-5-levels (EQ-5D-5L) questionnaire.
- People who self-reported that they were living with HIV responded to 11 questions capturing three composite stigma outcomes: internalized stigma (three questions), stigma experienced in the community (five questions), stigma experienced in healthcare settings (three questions).
- We use data from all people living with HIV in the cohort at 36 months (09/2017-07/2018) who self-reported living with HIV, had laboratory confirmed status and had complete data on HRQoL and potential confounders.
- Binary variables were generated to capture whether people living with HIV reported experiencing each type of stigma.
- Associations between HRQoL and stigma were examined using logistic regressions, adjusted for potential socio-economic confounders and with fixed effects for communities.

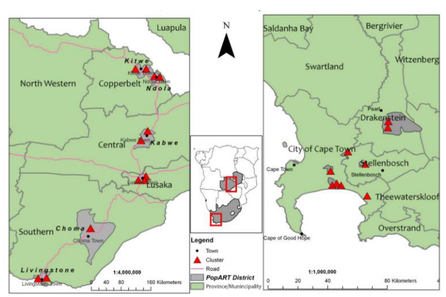

FIGURE 1. Locations of study communities.

Internalized stigma and stigma experienced in the community were associated with lower health-related quality of life in people living with HIV

RESULTS

- Data from 3,991 people living with HIV (88% women; 12% men) were examined (Table 1).
- Experiencing stigma in the community (n=693), and experiencing internalized stigma (n=552), were associated with higher odds of reporting problems in at least one HRQoL domain compared to not experiencing such stigma (Table 2).
- Experiencing stigma in a healthcare setting (n=158) was not associated with HRQoL (Table 2).

TABLE 1. Summary statistics for 3,991 people living with HIV in HPTN 071 (PopART) study.

	N (%)
Female sex	3,439 (88%)
18-24 years	308 (8%)
25-34 years	1,465 (37%)
35-44 years	1,890 (47%)
45+ years	328 (8%)
Problems reported in at least one HRQoL domain	474 (12%)

TABLE 2. Association between stigma and reporting problems in at least one domain of health-related quality of life.

	N (%)	Adjusted odds ratio (95% confidence interval)	P value
Experienced stigma in a community setting	693 (17%)	1.46 (1.12-1.89)	0.004
Experienced stigma in a healthcare setting	158 (4%)	0.94 (0.57-1.50)	0.813
Have internalized stigma	552 (14%)	1.84 (1.42-2.39)	<0.001

Adjusted for age, sex, community, education, wealth, religion, recreational drug use, TB status, marital status, and HIV care status. Those with missing data on potential confounders were excluded.

- Experiencing any type of stigma (n=1,034) was associated with higher odds of reporting problems in the domains of mobility (1.97, 1.23-3.14), self-care (1.92, 1.06-3.44), performing daily activities (1.98, 1.29-3.00), pain (1.85, 1.43-2.39), and anxiety/depression (2.73, 1.94-3.83), than not experiencing any type of stigma (Fig. 2).

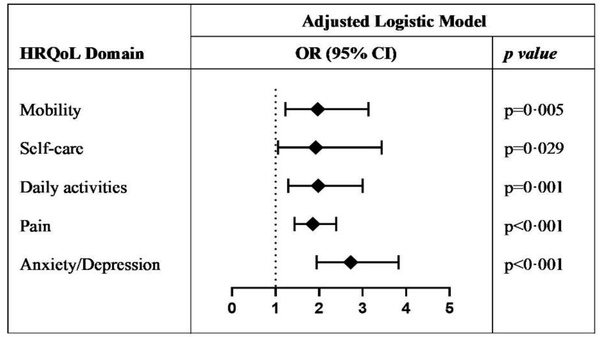

FIGURE 2. The association between experiencing any HIV-related stigma and reporting problems in five dimensions of health-related quality of life (HRQoL). Estimates are adjusted for age, sex, community, education, wealth, religion, recreational drug use, TB status, marital status, and HIV care status. OR, odds ratio; CI, confidence interval.

CONCLUSIONS

- Internalized stigma and stigma experienced in the community were associated with lower HRQoL in people living with HIV.
- Stigma experienced in healthcare settings was not associated with HRQoL in people living with HIV, however, stigma experienced in healthcare settings was rarely reported.
- Improving HRQoL among people living with HIV requires more than expanding service access, reductions in stigma and discrimination are necessary.

REFERENCES

1. Marcus JL, et al. ***Comparison of Overall and Comorbidity-Free Life Expectancy Between Insured Adults With and Without HIV Infection, 2000-2016***. *JAMA Netw Open. 2020;3(6):e207954. doi:10.1001/jamanetworkopen.2020.7954.*

2. Thomas R, et al. ***Differences in health-related quality of life between HIV-positive and HIV-negative people in Zambia and South Africa: a cross-sectional baseline survey of the HPTN 071 (PopART) trial.*** *Lancet Glob Health. 2017;5(11):e1133-e41. doi:10.1016/S2214-109X(17)30367-4*

3. Parcesepe AM, Nash D, Tymejczyk O, Reidy W, Kulkarni SG, Elul B. ***Gender, HIV-Related Stigma, and Health-Related Quality of Life Among Adults Enrolling in HIV Care in Tanzania.*** *AIDS Behav. 2020;24(1):142-50. doi:10.1007/s10461-019-02480-1*

For more information, visit **hptn.org** and follow us:

@HIVptn

We are grateful to all members of the HPTN 071 (PopART) Study Team and to the study participants and their communities for their contributions to this research. Overall support for the HIV Prevention Trials Network (HPTN) is provided by the National Institute of Allergy and Infectious Diseases (NIAID), Office of the Director (OD), National Institutes of Health (NIH), National Institute on Drug Abuse (NIDA), the National Institute of Mental Health (NIMH), and the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) under Award Numbers UM1AI068619-15 (HPTN Leadership and Operations Center), UM1AI068617-15 (HPTN Statistical and Data Management Center), and UM1AI068613-15 (HPTN Laboratory Center). We also acknowledge funding from the President's Emergency Plan for AIDS Relief, the International Initiative for Impact Evaluation (3ie), the Bill & Melinda Gates Foundation, the Wellcome Trust and the UK Medical Research Council.

Presented at ISPOR 2023
Boston, MA, USA
May 7-10, 2023