



# Changes in quality of life of PLHIV in Estonia from 2005 to 2013

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## BACKGROUND

The HIV epidemic in Estonia erupted among PWID in early 2000s. Although HIV incidence has fallen from 108 to 21 per 100,000 (in 2001 and 2015, respectively), Estonia still has the **highest incidence in Europe**. The aim of our study was to evaluate quality of life (QoL) of PLHIV in Estonia throughout the epidemic.

## METHODS

Data from **series of cross-sectional studies** (2005, 2008, 2013) using convenience sampling and standardised data collection methodology were analysed. Patients from three outpatient HIV clinics providing 90% of care to PLHIV in Estonia were recruited during routine visits to the clinic. PLHIV at least 18 years old and aware of their HIV-positive serostatus for at least three months were eligible. Data were gathered by **self-administered questionnaire**. QoL was measured with WHOQoL HIV-Bref.

## RESULTS

Table 1 shows differences among PLHIV receiving outpatient care in Estonia and Table 2 analyses changes in QoL throughout the years.

## CONCLUSIONS

- We observed **significant shifts in QoL** in 8 years: environmental, physical and health-related QoL were rated higher but independence related and psychological QoL lower in 2013 vs. 2005.
- Differences in studies' sample characteristics indicate to an **ageing cohort**.
- Our results illustrate the necessity to **monitor routinely actual needs** of a changing HIV population and adjust services accordingly to promote best possible QoL. Currently, more attention is needed on actions to **improve psychological wellbeing and manageability of everyday activities** among PLHIV in Estonia.

**Table 1.** Socio-demographic characteristics of participants by year of study, Estonia

	2005 (N=446)	2008 (N=441)	2013 (N=800)	<i>p</i>
Men (vs. women)	237 (53)	225 (51)	471 (59)	.020
Age <sup>a</sup>	26±7	29±6	34±8	<.001
Russian ethnicity (vs. Estonian, other)	381 (86)	380 (86)	676 (85)	.899
Employed (vs. unemployed, studying, other)	131 (29)	136 (31)	323 (41)	<.001
On ART	108 (24)	219 (50)	717 (91)	<.001
>5y since first HIV+ test result (vs. <5 years)	39 (9)	192 (46)	619 (77)	<.001
HIV acquired through IDU (vs. sexual, other)	267 (60)	235 (54)	368 (49)	<.001

Note. Data presented as n (%) followed by  $\chi^2$ -test, <sup>a</sup> data presented as mean±SD followed by ANOVA test.

**Table 2.** Quality of life among PLHIV in Estonia using WHOQoL-HIV Bref

	2005	2008	2013	<i>p</i>	Post Hoc
Physical	13.4±3.6	13.3±3.3	13.9±3.4	.002	2013-2005; 2013-2008
Psychological	13.7±2.7	13.2±2.8	12.4±3.2	<.001	2013-2005; 2013-2008
Independence	13.8±3.4	14.2±3.3	12.5±3.4	<.001	2013-2005; 2013-2008
Relationships	13.5±3.2	13.4±3.4	13.2±3.7	.306	
Environment	12.2±2.4	NA	13.4±4.5	<.001	2013-2005
Beliefs	13.6±3.3	13.8±3.3	14.1±3.5	.055	
Health-related QoL	2.5±1.0	2.5±1.0	2.8±1.0	<.001	2013-2005; 2013-2008

Note. Data presented as mean±SD followed by ANOVA test. Post Hoc (Tukey's range test) analyses show pairs of studies with statistically significant difference.

