

Decomposing inequality in knowledge about HIV prevention and discriminatory attitudes towards people living with HIV among youth aged 15-24 years in Nepal

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Background

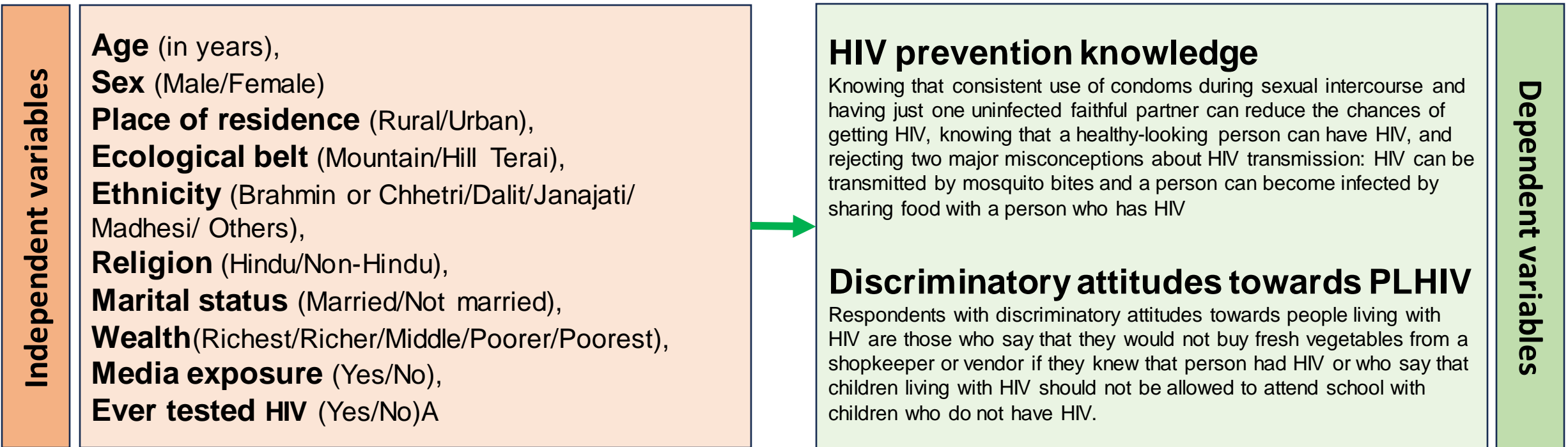
- Knowledge about HIV prevention is essential to enable youths (with greater risks) to avoid HIV infections, yet disparities exist based on socioeconomic status
- HIV-related stigma and discrimination hampers HIV testing and undermines prevention and care efforts, affecting both People living with HIV (PLHIV) and those at risk.
- The poorer are less informed and the richer are better informed: comprehensive knowledge about HIV is concentrated among the rich [1]
- Inequalities in HIV prevention knowledge and discriminatory attitudes towards PLHIV can thwart the government's effort to reduce HIV stigmatization and achieve universal access to HIV care and treatment.

Objectives

- To assess socio-economic inequalities in HIV prevention knowledge and discriminatory attitudes toward PLHIV among youths aged 15-24 years in Nepal.
- To measure and decompose the inequality differential in HIV prevention knowledge and discriminatory attitudes between 2016 and 2022.

Methodology

- **Study design:** Secondary data analysis of Nepal Demographic and Health Surveys, NDHS-2011, NDHS-2016 and NDHS-2022
- **Study population:** 6713, 6429, and 7122 youths aged 15-24 years from NDHS-2011, 2016 and 2022, respectively



Methodology

- **Statistical analysis:**

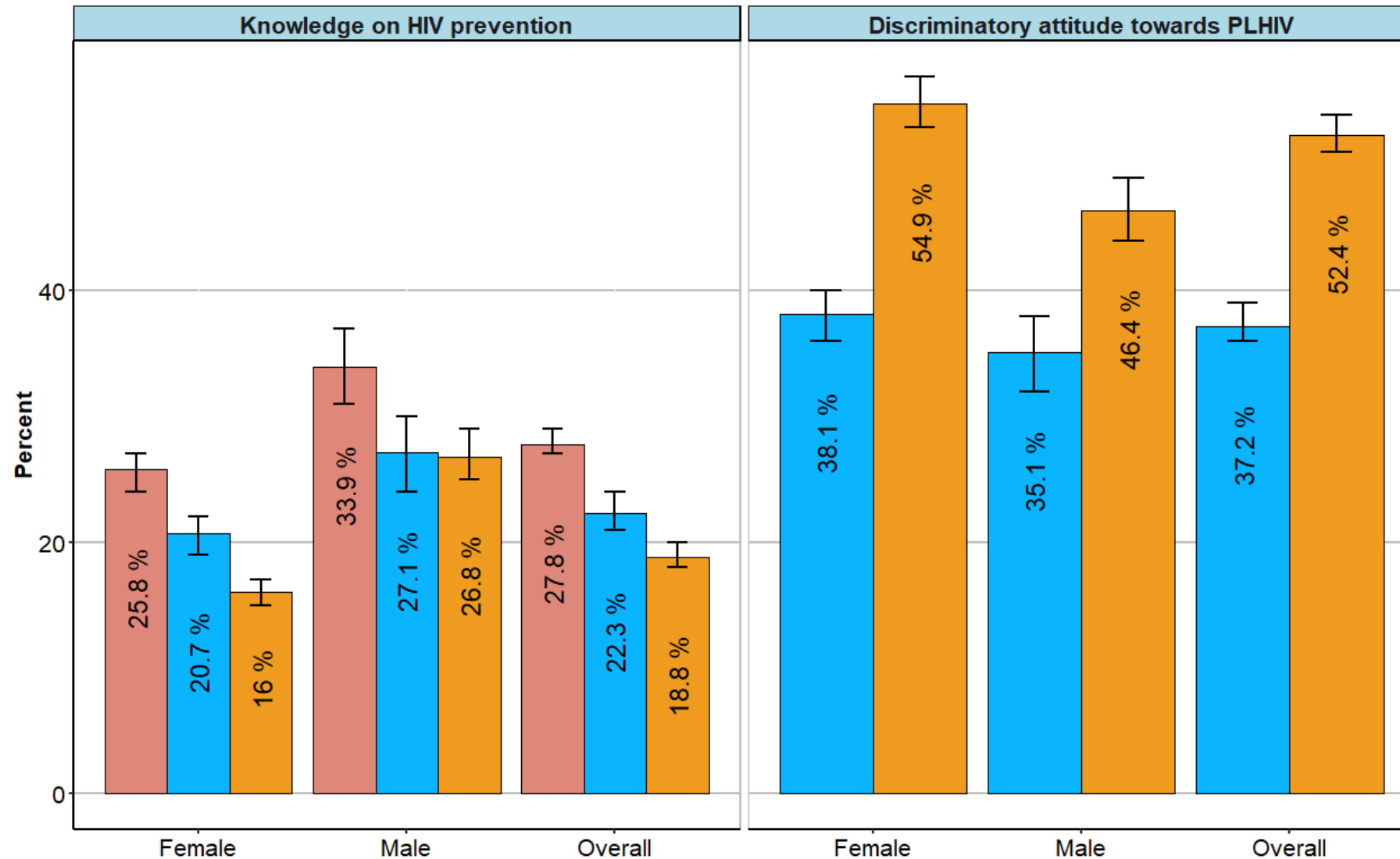
- Weighted analysis to adjust complex survey design and non-response rates.
- Wealth-related inequality was assessed using concentration indexes (CIx) and concentration curves.
- Decomposed inequalities by participant's characteristics using the Wagstaff method.
- Applied Oaxaca-Blinder decomposition method to measure and decompose the inequality differential between two time periods.
- Used R (version:4.3.2) [**Packages:** *survey, tidyverse, rineq, patchwork*]

Results

Characteristics of study participants

Characteristics		NDHS 2011 (n=6713)	NDHS 2016 (n= 6429)	NDHS 2022 (n=7122)
Sex	Male	1,663 (24.8%)	1,580 (24.6%)	1,842 (25.9%)
	Female	5,050 (75.2%)	4,849 (75.4%)	5,280 (74.1%)
Age	<20	3,731 (55.6%)	3,530 (54.9%)	3,627 (50.9%)
	20-24	2,983 (44.4%)	2,900 (45.1%)	3,495 (49.1%)

Knowledge on HIV prevention and discriminatory attitude towards PLHIV among youths



The proportion of youth with HIV prevention knowledge decreased from 27.8% in 2011 to 18.8% in 2022, while discriminatory attitudes increased from 37.2% in 2016 to 52.4% in 2022.

Knowledge and discriminatory attitude differs by different sociodemographic variables

Knowledge on HIV prevention and discriminatory attitude towards PLHIV among youths by wealth quintile

HIV prevention knowledge wealth quintile	2011	2016	2022
Poorest	10.2%	15.4%	14.6%
Poorer	17.1%	17.7%	12.6%
Middle	20.8%	15.5%	14.7%
Richer	35.4%	23.1%	20.5%
Richest	48.8%	39.0%	31.5%

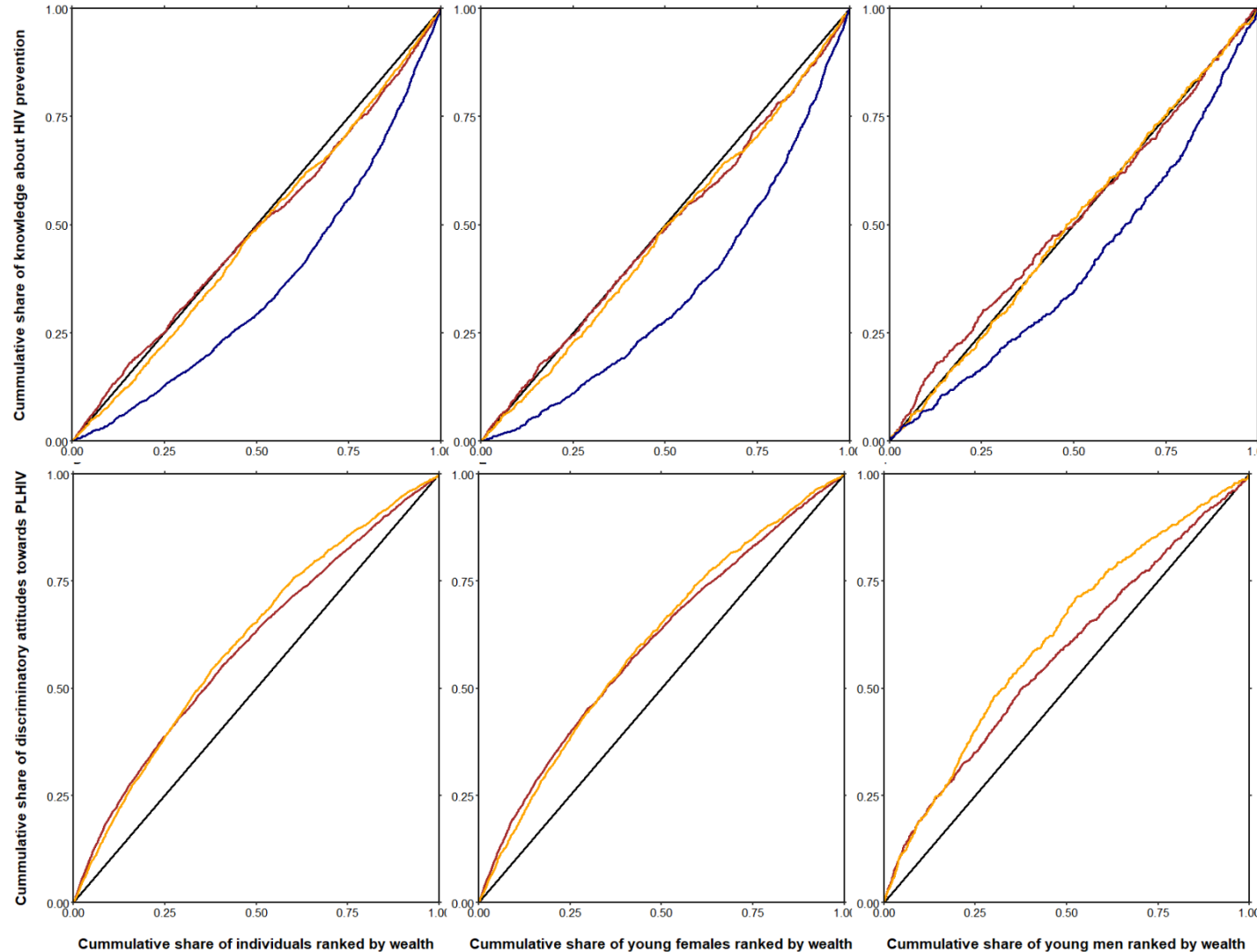
Discriminatory attitude by wealth quintile	2016	2022
Poorest	53.1%	60.9%
Poorer	40.6%	58.7%
Middle	41.2%	57.2%
Richer	34.2%	49.6%
Richest	21.2%	39.0%

Concentration curves compared between 2011, 2016 and 2022

Knowledge on HIV prevention among youths compared between 2011, 2016 and 2022

Year
 2011
 2016
 2022

Discriminatory attitude towards PLHIV among youths compared between 2016 and 2022



Among all youths

Among Female youths

Among male youths

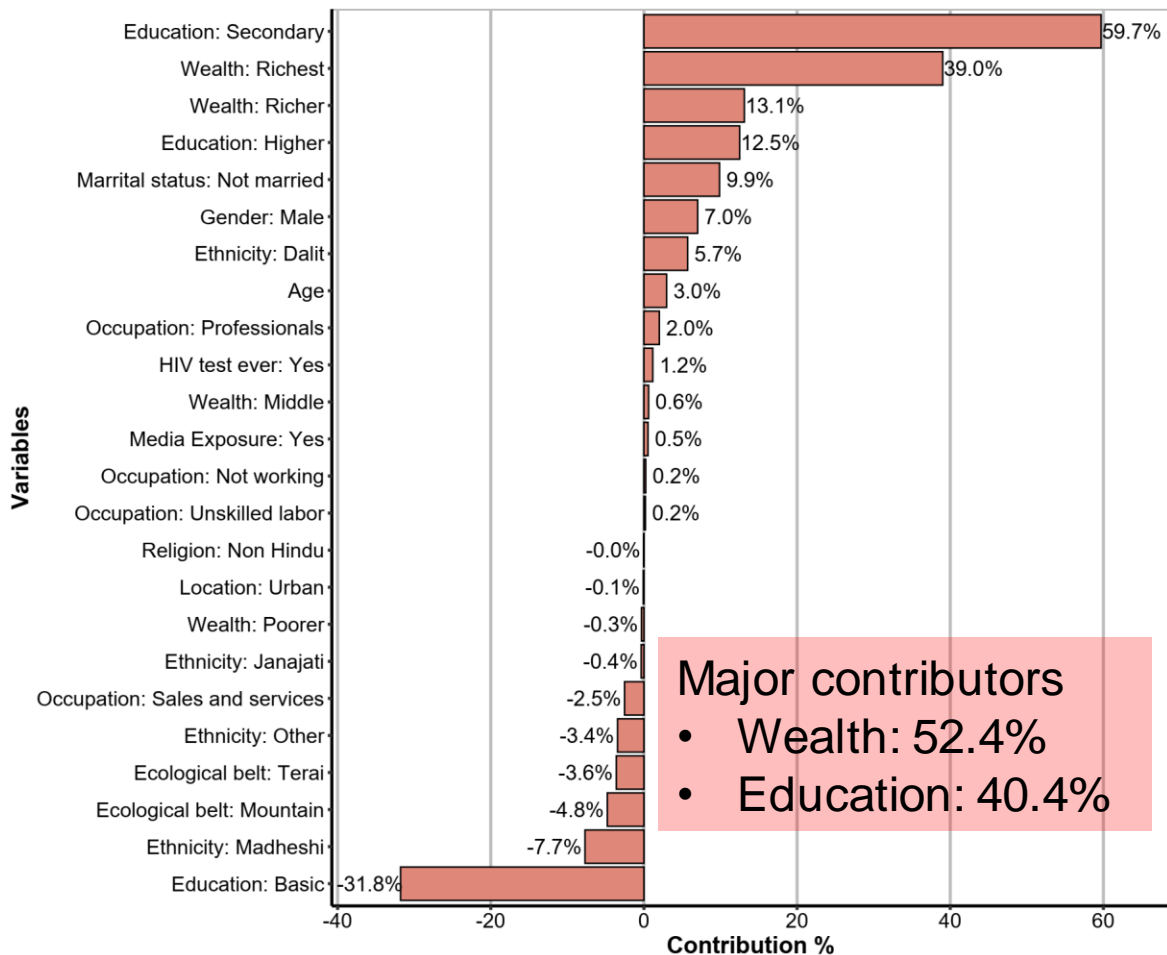
CIx for HIV prevention knowledge decreased from 0.288 in 2011 to 0.176 in 2022

Overall reduction in inequality

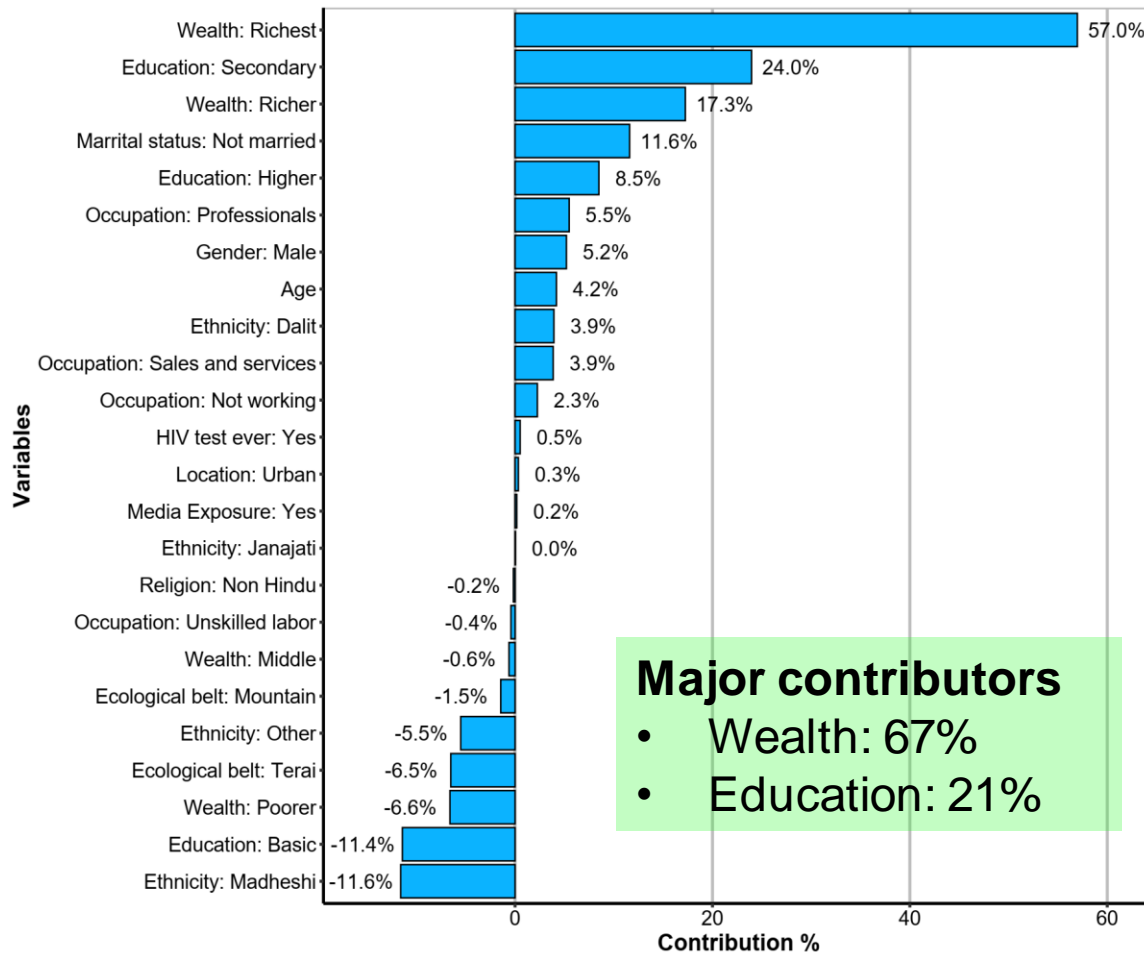
CIx for discriminatory attitudes increased from -0.131 in 2016 to -0.079 in 2022

Decomposition of concentration index (NDHS 2022)

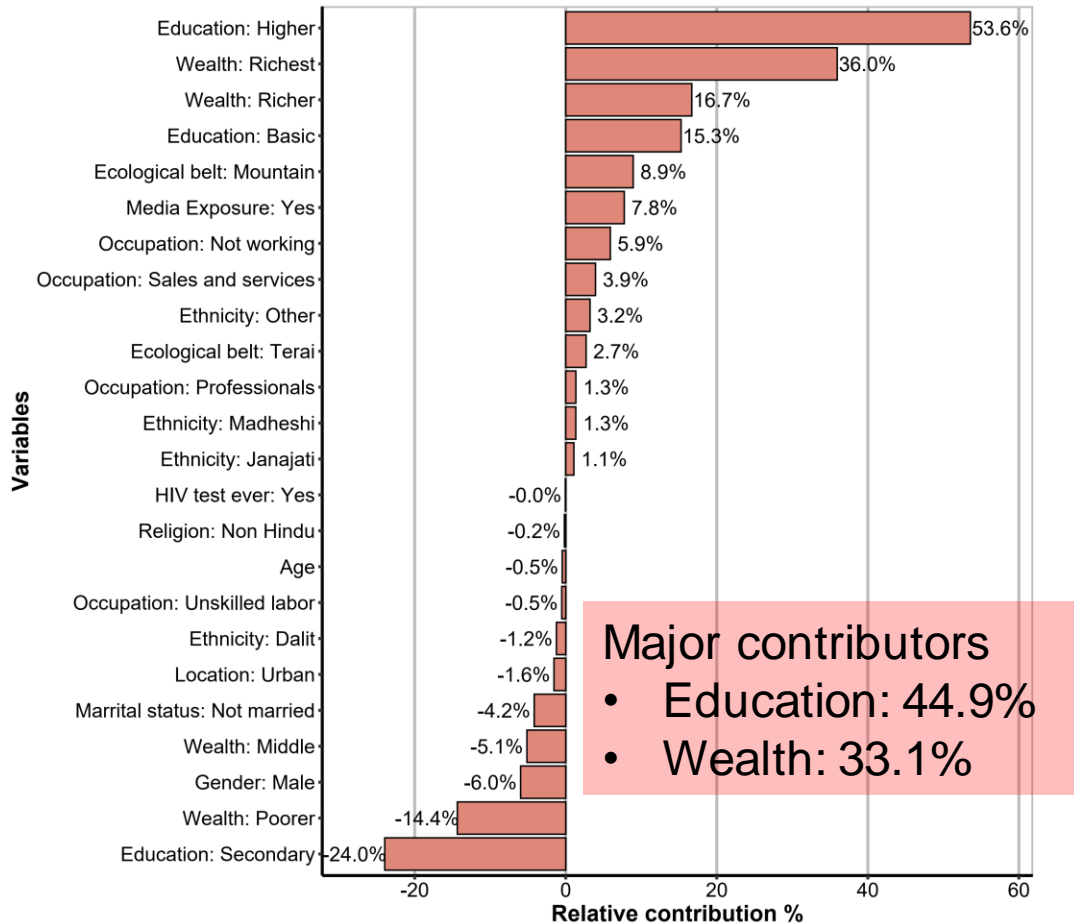
Comprehensive knowledge on HIV prevention



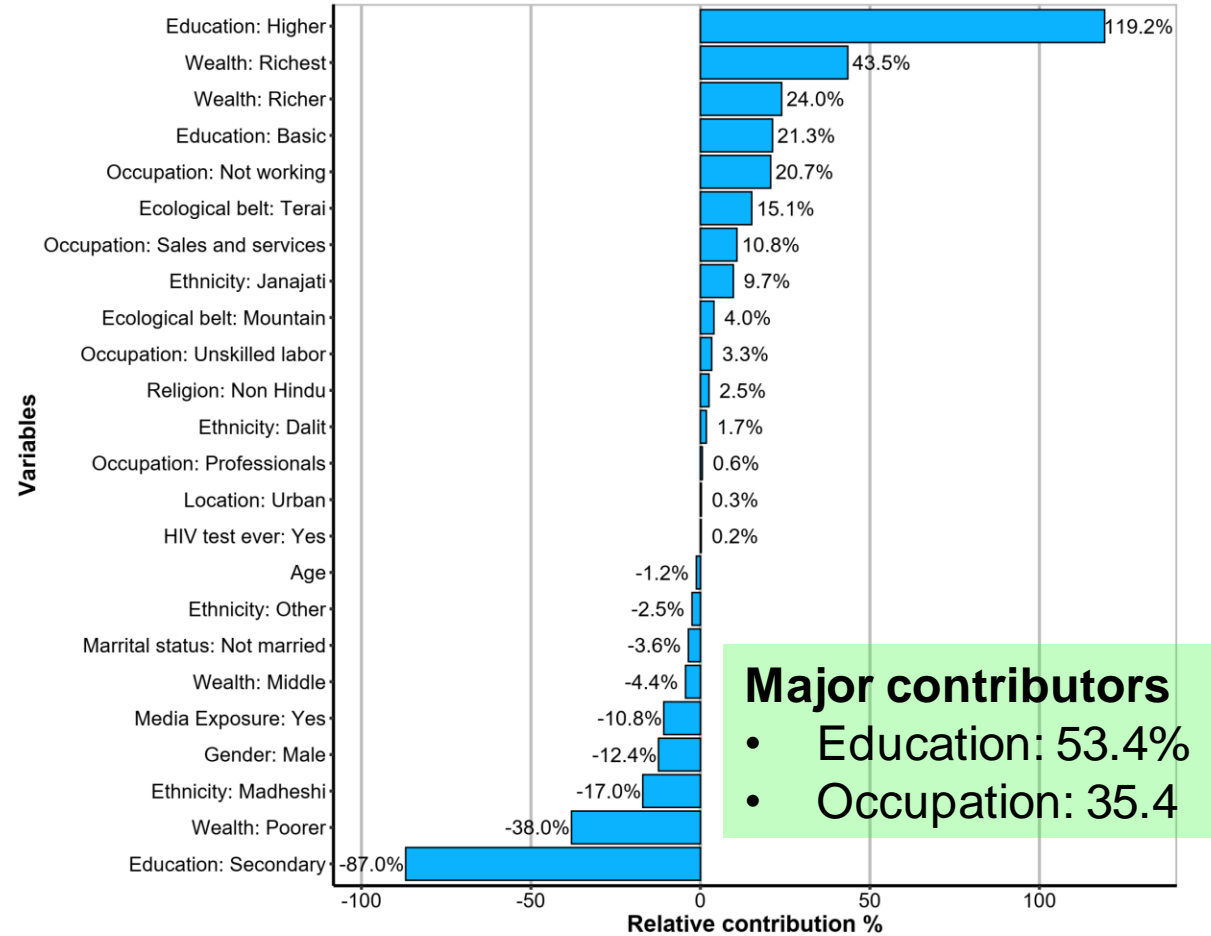
Discriminatory attitude towards PLHIV



Oaxaca-Blinder decomposition



**Comprehensive knowledge on HIV prevention
(change between 2011 and 2022)**



**Discriminatory attitude towards PLHIV (change
between 2016 and 2022)**

Conclusions

- The proportion of youth with HIV prevention knowledge decreased while discriminatory attitudes has increased.
- The inequality in HIV prevention knowledge between 2011 and 2022, and discriminatory attitudes between 2016 and 2022 among youth has reduced, with wealth and education being the major contributing factors.
- Providing community-based HIV testing and counselling services that incorporate behavior change and HIV prevention communication could be a game changer to enhance knowledge and positive attitudes towards PLHIV.
- The government should work collectively with schools and communities to design HIV-related educational interventions for youths and integrate them in course curricula.

Thank you!



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Bio of Presenter

Mr. Bikram Adhikari is public health professional, currently working as Data and Monitoring officer at HERD International. He holds master's degree in Public Health from B.P. Koirala Institute of Health Sciences. He is keen in applying epidemiological and biostatistical methods on various research areas including communicable and non-communicable diseases.

