Topic: Multilevel analysis of the HIV testing in Burkina Faso

Presented by Emmanuel IDOHOU
Supervised by Dr Bassiahi Abdramane SOURA & Dr Georges GUIELLA
Academic year : 2017-2018

Background

- HIV / AIDS: a public health problem
- HIV testing = Prevention methods
- No testing or late diagnosis of HIV is associated with new HIV infections, increased morbidity , mortality and health care costs.
- HIV testing levels must be improved in Burkina Faso; so what are the factors associated with HIV testing in Burkina Faso?

Aim: To examine the factors associated with HIV testing in Burkina Faso in order to provide research evidence that will direct public health policies and interventions

Data & methods:

Data source : the 2010-Burkina Faso Demographic and Health Survey (BF DHS), sample of 7,178 men 15-59 years of age and 16, 798 women 15-49 years of age who indicated that they had heard about HIV / AIDS at least once.

- Bivariate analysis
- Multilevel logistic analysis

All analyses were stratified according to sex and conducted using SPSS, MLwiN & Excell

Model:

$$\text{logit}(\pi_{ij}) = \ln\left(\frac{\pi_{ij}}{1-\pi_{ij}}\right) = (\beta_0 + \mu_{0j}) + \alpha_1 X_{ij} + \alpha_2 X_{ij} T_j + \lambda T_j + e_{ij}$$

Findings

Graphic: Percentage of persons who have been tested for AIDS in the last 12 months compared to national and international targets by 2020

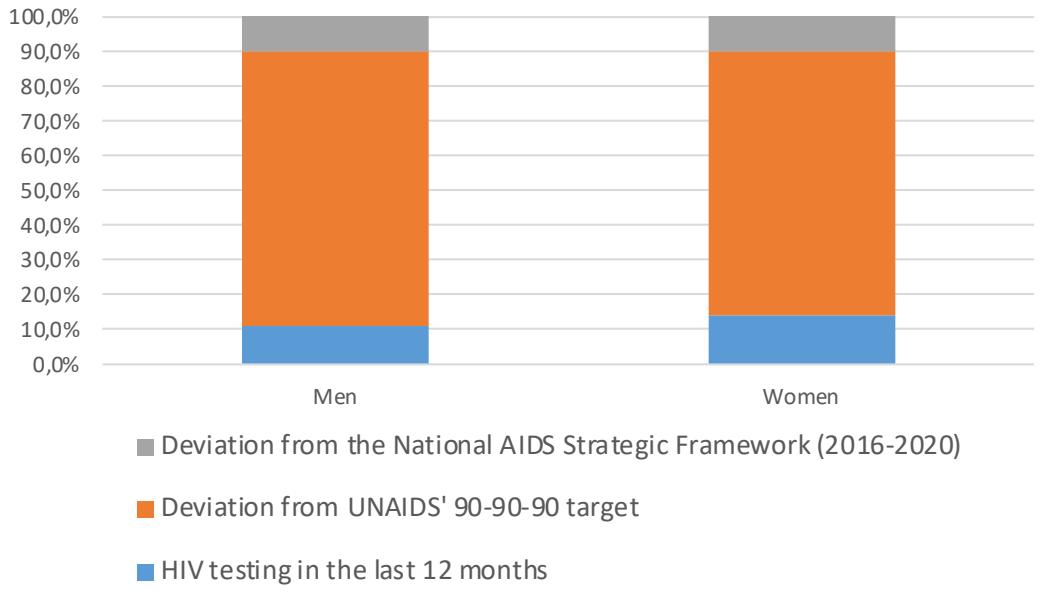

Table: Multilevel logistic regression for uptake of HIV testing by some characteristics (stratified by gender)

Chracteristic	Odds Ratio	
	Men	Women
Highest level of (personal) education		
No education	ref	
Primary	1,69***	1,40***
Secondary or higher	3,31***	2,16***
Individual level of tolerance towards people living with HIV		
Low	ref	
Middle	1,97***	1,68***
High	2,39***	2,04***
Community education	2,16*	1,99 ns
Risky sexual behavior x HIV prevalence (interaction effects)	1,78*	1,44 ns
Sigma_u (in model with only a constant term)	1,166***	0,711***

***p≤ 1‰ ; **p≤1% ; *p≤5% ; *ns =not significant*

Source : Computation from BF DHS, 2010

In short, community characteristics influence HIV testing even though it is more dependent on the individual characteristics . What about the HIV self-testing ?