HEALTH LITERACY AS A MEDIATOR OF THE RELATIONSHIP BETWEEN SOCIOECONOMIC POSITION AND PREEXPOSURE PROPHYLAXIS UPTAKE AMONG MSM LIVING IN FRANCE

Youssoufa M. Ousseine, Cécile Allaire, Virginie Ringa, Nathalie Lydie, Annie Velter

youssoufa.ousseine@santepubliquefrance.fr

BACKGROUND (1/2)

Santé publique France

- Every year about 6,000 persons are diagnosed with HIV in France
- Men who have sex with men (MSM) are the people most affected by HIV with 43% of new HIV diagnoses in 2019 followed by heterosexual born-abroad (37%)
- In France, the HIV prevention arsenal has expanded with the advent of pre-exposure prophylaxis (PrEP) since 2016.

  - ✓ Pre-exposure prophylaxis (PrEP): is an effective medicine to prevent getting HIV for people at risk for HIV

BACKGROUND (2/2)

Santé publique France

HIV preventive behaviors (ex: screening, uptake of PrEP, …) are associated with…

- ❑ Socioeconomic status (education level, perceived financial difficulties and profession)

Socioeconomic status is associated with…

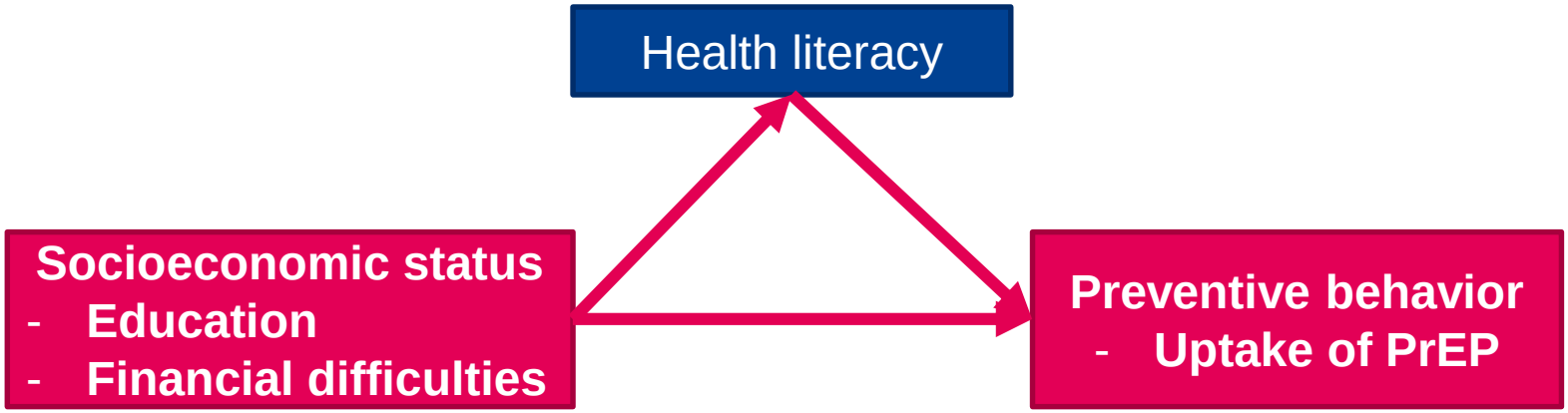
- ❑ Health literacy

Health literacy (HL) is associated with…

- ❑ Different health outcome (health status, navigation and interaction with health system, health promotion, disease prevention)

OBJECTIF

Assess whether HL mediates the relationship between socioeconomic status (SES) and uptake of pre-exposure prophylaxis (PrEP) as an HIV prevention tool among MSM participating in the ERAS 2019 survey



METHODS

Santé publique France

- ❑ **Self-administered online questionnaire among MSM**
- ❑ **Measures**
  - ✓ **Dependent variable: uptake of PrEP in the previous six months during anal intercourse with a casual partner**
  - ✓ **Mediator: health literacy evaluated by HLQ scale 'ability to actively engage with healthcare providers'**
  - ✓ **Independent variables: socioeconomic status measured by education level and perceived financial difficulties**
  - ✓ **Covariates (age, place of residence, stable relation with a man and social support)**
- ❑ **Statistic analysis**
  - ✓ **Descriptive statistics**
  - ✓ **Mediation analysis with mediation package in R software**

MAIN PARTICIPANTS' CHARACTERISTICS (N=13,629)

Santé publique France

Characteristics	N	%
Age		
Median [IQR]	32	[24-43]
Education level		
above high school diploma	10,621	78.0
Perceived financial situation		
It's ok/comfortable	8,468	62.1
Just/hard/debt	5,161	37.9
Stable relation with man		
Yes (Married/cohabitant/ civil partnership)	6,743	49.5
Commune of habitation		
Urban	12,060	88.5
Gay community support	5,047	37.0
Health literacy		
Adequate	9,945	73.0
Uptake of PrEP	1,288	9.5

MEDIATOR MODELS FOR EDUCATION LEVEL AND PERCEIVED FINANCIAL SITUATION

Santé publique France

				Low HL		
	AOR*	95%CI	P	AOR	95%CI	P
Education level						
Above high school diploma	1					
High-school diploma or lower	1.04	0.95-1.14	0.318			
Perceived financial situation						
It's ok/Comfortable				1		
Just/hard/debt				1.30	1.20-1.40	<0.001

* Adjusted for covariates (age, place of residence, stable relation with a man and social support)

- Education level was not associated with HL (ability to actively engage with healthcare provider's)
- However, perceived financial situation was associated with HL (ability to actively engage with healthcare provider's)

OUTCOME MODEL FOR EDUCATION LEVEL AND MEDIATION ANALYSIS

Santé publique France

	Uptake of PrEP		
	AOR	95%CI	P
Health literacy			
Adequate	1		
Low	0.62	0.54-0.72	<0.001
Education level			
Above high school diploma	1		
High-school diploma or lower	0.79	0.68-0.91	0.001
Mediation analysis	B	95%CI	P
Total effect	-1.82E-02	-0.02-(-0.01)	0.002
Average causal mediation effect (ACME)	-2.78E-04	-0.001-0.0	0.428
Average direct effect	-1.79E-02	-0.027-(-0.01)	0.002

- No mediating effect of HL (ability to actively engage with healthcare provider's) on the relationship between education level and uptake of PrEP was observed

OUTCOME MODEL FOR EDUCATION LEVEL AND MEDIATION ANALYSIS

Santé publique France

	Uptake of PrEP		
	AOR	95%CI	P
Health literacy			
Adequate	1		
Low	0.63	0.54-0.73	<0.001
Perceived financial situation			
It's ok/comfortable	1		
Just/hard/ debt	0.93	0.82-1.06	0.327
Mediation analysis			
Total effect	-6.67E-03	-0.01-0.0	0.210
Average causal mediation effect (ACME)	-1.78E-03	-0.002-0.0	<0.001
Average direct effect	-4.89E-03	-0.01-0.01	0.340

- However, a total mediation of HL (ability to actively engage with healthcare provider's) on the relationship between perceived financial difficulties and uptake of PrEP was observed

CONCLUSIONS

Santé publique France

- MSM'S ability to engage with health care providers may offset the effect of financial hardship on uptake of PrEP
- In the current context of the availability of PrEP in outpatient settings, these results remind us of the central role of general practitioners in the dissemination of sexual health prevention messages.
- Addressing sexual health issues during consultations, particularly with patients who have the most difficulty in discussing with their doctor and understanding the benefits of PrEP, is a way to reduce social inequalities in health. In this context, dedicated time, training and support for these professionals are essential