





UNDERSTANDING THE INTENTION TO UNDERGO REGULAR HIV TESTING AMONG FEMALE SEX WORKERS IN BENIN: A KEY ISSUE FOR ENTRY INTO HIV CARE

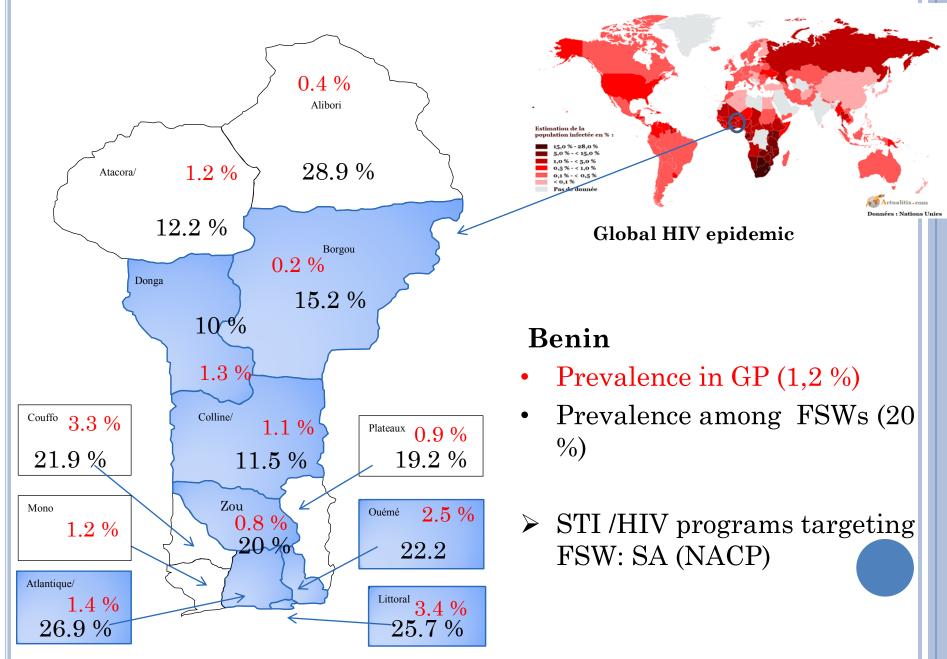
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## OUTLINE

- Background
- Objectives
- Methods
- Results and discussion
- Conclusion

### **BACKGROUND (1) : OVERVIEW OF HIV EPIDEMIC**



# **BACKGROUND (2)**

- HIV testing is an important component for programs, an entry point for HIV prevention and access to care,
- Increasingly important with context of treatment as prevention (TasP) and pre-exposure prophylaxis (PreP),
- Access to HIV tests has increased in recent years (rapid test, availability),
- <u>Regular HIV testing among high-risk populations</u> <u>remains a challenge</u>.



To identify psychosocial factors associated with the intention to be HIV tested every 3 months among female sex workers (FSWs) in Benin.

## **METHODS**

## **1- Questionnaire Development**

We developed and validated an interview questionnaire based on the Theory of Planned Behavior (TPB) and other theoretical variables.

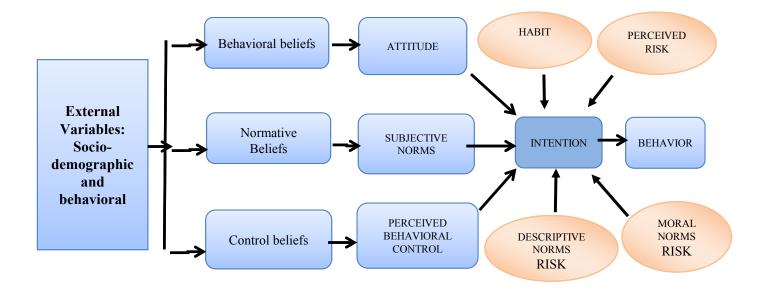
## 2- Cross-sectional study

• We interviewed 450 FSWs in their work place.

## **3-** Statistical analyses

- Descriptive analyses (frequencies, mean values, and SDs) for all variables, using SAS 9.3 (SASInstitute Inc., Cary, NC)
- Structural equation modeling to identify the determinants of intention (using Amos software)

# THEORETICAL FRAMEWORK: EXTENDED VERSION OF TPB (ADAPTED FROM AJZEN, 1991)



Variables from the Theory of Planned Behavior

Variables added from other psychosocial theories

## **RESULTS AND DISCUSSION**

#### **SOCIODEMOGRAPHIC CHARACTERISTICS AMONG FSWS IN BENIN (N = 447)**

Sociodemographic Variables		
	Mean± Standard Deviation	Median
Actual a <b>ge (year)</b>	30.1±8.4	28
Age at initiation of sex work (year)	$26.1{\pm}7.6$	25
Duration in sex work (year)	$4.0{\pm}3.6$	3.0
Nationality	Frequency	Percent (%)
Benin	208	46.5
Nigeria	113	25.3
Togo	77	17.2
Ghana	35	7.8
Other	14	3.1
Marital status		
Separated /divorced	219	49.0
Single	177	40.0
Widow	36	8.0
Married	15	3.0
Religion		
Catholic	186	41.6
Other Christian	161	36.5
Muslim	36	8.0
No religion	36	8.1
Traditional	21	4.7
Other	7	1.5
Education		
Unschooled	80	17.9
Primary 1	172	38.5
Secondary 1	120	26.8 g
Secondary 2	59	13.2
University	16	3.6

#### **BEHAVIORAL CHARACTERISTICS OF FEMALE SEX WORKERS IN BENIN RELATED TO HIV TESTING HISTORY, PERCEIVED RISK OF BEING INFECTED BY HIV, AND THE INTENTION OF BEING TESTED FOR HIV (N=447)**

Variables	Frequency	%
Tested for HIV during lifetime		
Yes	389	87.0
No	58	13.0
HIV testing during the last year		
Yes	292	65.3
No	155	34.7
Period of last HIV testing among those who have been tested (n=384) <sup>a</sup>		
Last 3 months	154	40.0
Between 3 and 6 months	81	21.0
Between 6 and 12 months	57	15.0
Between 12 and 36 months	64	16.0
More than 36 month	24	6.0
Unknow	04	1.0
Level of intention to be HIV tested during next three months (INT)		
Strong intention (score $\geq 4$ )	310	69.4
Low intention (score $< 4$ )	137	30.6
Notes : <sup>a</sup> Five questionnaires indicated no response <sup>b</sup> One questionnaire indicated no response		

#### VARIABLES PREDICTING INTENTION TO BE HIV TESTED IN THE NEXT THREE MONTHS AMONG FSWS IN BENIN (STANDARDIZED REGRESSION WEIGHTS)

Variables	Standardized regression coefficients (β)	P-value	Regression coefficient (R <sup>2</sup> )	Change in R <sup>2</sup>
Block 1 (direct variable of TPB)				
Attitude (ATT)	0.20***	< 0.001		
Normative belief (NB)	0.00	-	0.40	
Perceived behavioral control (PBC)	0.48***	< 0.001	0.40	-
Block 2 (Final model)				
Attitude (ATT)	0.119**	0.01		
Normative belief (NB)	-0.071*	0.03		
Perceived behavioral control (PBC)	0.262***	< 0.001		
Control beliefs (CB)	0.221***	< 0.001		
Perceived risk (PR)	0.072*	0.03		
Descriptive norm (DN)	0.242***	< 0.001	0.55	0.15
Habit (HAB)	0.207***	< 0.001		
*P<0.05; **P<0.01; ***P<0.001				

FINAL THEORETICAL FRAMEWORK INCLUDING SIGNIFICANT VARIABLES PREDICTING INTENTION TO BE HIV TESTED IN THE NEXT 3 MONTHS AMONG FSWS IN BENIN.

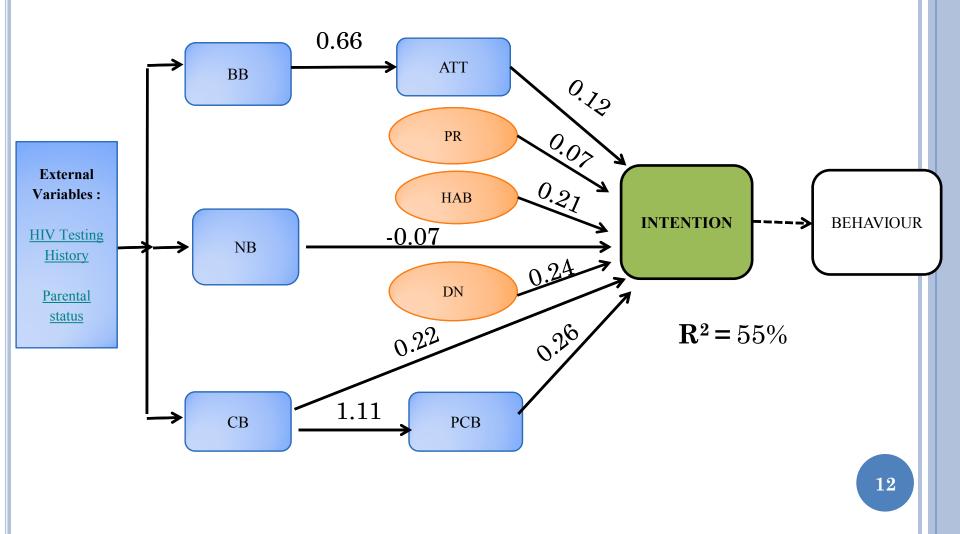


Table : Modifying effect of HIV testing history on theoreticalvariables of the model predicting the intention to be HIV tested in<br/>the next three months among FSWs in Benin

	Never tested for HIV during lifetime			HIV tested during lifetime		
	Standardized Regression Weights (β)	P-value	$\mathbb{R}^2$	Standardized Regression Weights (6)	P-value	$\mathbb{R}^2$
NB	-0.365	< 0.001		-0.072	0.066	
PR	-0.105	0.038	0.00	0.041	0.301	0.45
DN	-0.568	< 0.001	0.89	0.236	< 0.001	0.47
ATT	-0.028	0.598		0.035	0.517	
НАВ	1.165	< 0.001		0.194	< 0.001	
PBC	0.235	< 0.001		0.306	< 0.001	
СВ	0.115	0.100		0.218	< 0.001	

## STRENGTH AND LIMITATIONS

## Strength

- Extended model of the TPB relevant in explaining FSWs' intention
- Large sample size reinforced statistical power.
- Data collection and the study instrument limit missing data and to improve the quality of the data.
- The final model fitted our data well: reasonable estimates of the model and achieve good internal validity.

## Limitations

• Recall bias and social desirability when collecting data, they can not be totally ruled out

# CONCLUSION

- This is first study of its kind in Benin.
- Most important determinants in descending order: Perceived control (PBC), descriptive norms (DN), control beliefs (CB), habits (HAB), attitude (ATT), perceived risk (PR), and normative beliefs and (NB).
- Findings suggest that a theory-based program of educational intervention should focus on reducing practical barriers and overcoming perceived obstacles to HIV testing.
- Programs should strongly consider the descriptive norm, using peer educators' influence and experience to convince FSWs to undergo regular HIV testing.

## ACKNOWLEDGEMENTS

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- JAIDS (Claire Hollande...)

# THANKS FOR YOUR ATTENTION