EXAMINING INTEREST IN HIV PRE-EXPOSURE PROPHYLAXIS DELIVERY MODALITIES AMONG GHANAIAN IMMIGRANT WOMEN IN THE US

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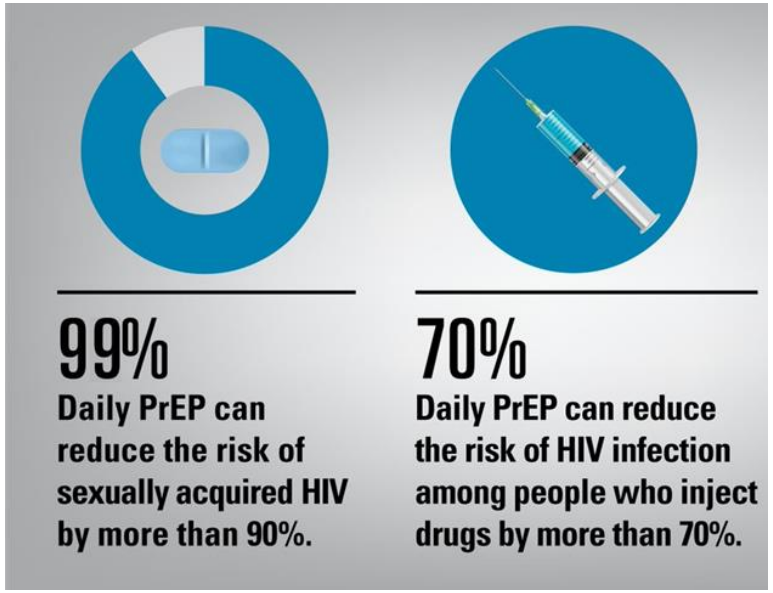
African Immigrants in the USA

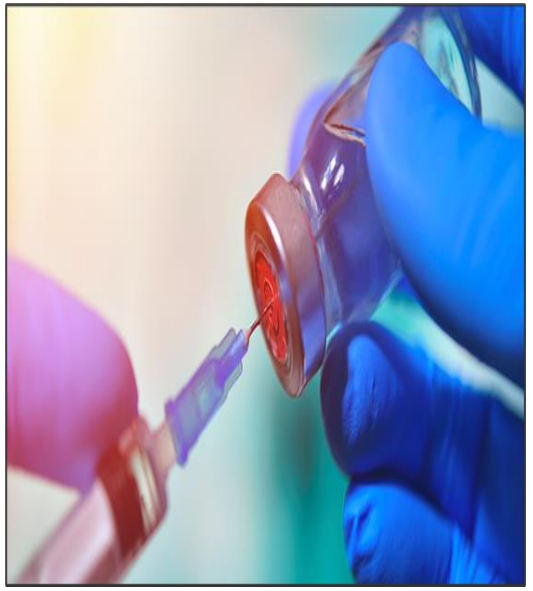
- One of the fastest growing immigrant population
- Stark disparities in infection rates especially among ethnic and minority groups
- African immigrants have a six-fold HIV transmission rate compared to the general U.S population
- Disproportionate burden of the rate of HIV diagnosis among African immigrants is borne by women
- This suggests prevention opportunities may not be effectively reaching this population.

Pre-Exposure Prophylaxis



Implant

Intravaginal ring



Injectable PrEP

Retrieved from https://researchforevidence.fhi360.org/expanding-hiv-prep-with-long-acting-injectables-what-can-we-learn-about-acceptability-from-a-clinical-trial

Methods

- Objective: Examine factors associated with willingness to use PrEP delivery methods (i.e., daily oral pill, injectable, microbicide gel, vaginal ring, subdermal implant, vaginal film) among Ghanaians – a subgroup of African immigrants

- 236 Ghanaian immigrant women recruited through WhatsApp in May 2021
- Inclusion criteria: >18 years old, Ghanaian born, living in the United States, able to access WhatsApp, able to read English
- Descriptive, bivariate, and multivariable logistic regression analyses using STATA software

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RESULTS

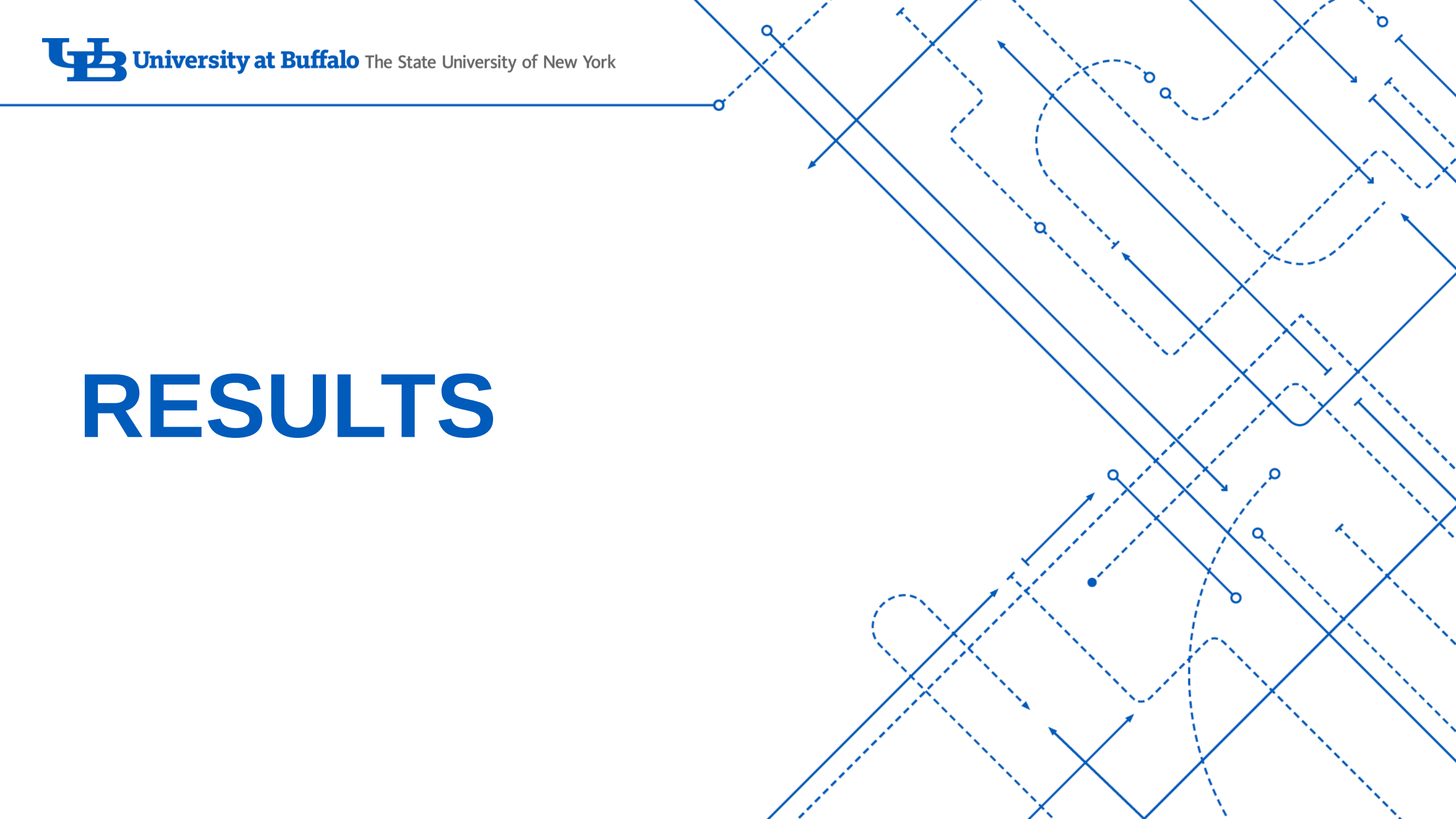

Table 1. Descriptive characteristics and bivariate analysis of willingness to use PrEP modality by sociodemographic characteristics of participants (N= 236)

	Total n (%)	Unwilling to use n (%)	Willing to use n (%)	
		45 (19.07)	191 (80.93)	p-value
Age				.125
18-24	40 (17.02)	12 (27.27)	28 (14.66)	
25-34	162 (68.94)	28 (63.64)	134 (70.16)	
35 and above	33 (14.04)	4 (9.09)	29 (15.18)	
Gender				**<.001**
Ciswoman	212 (89.83)	33 (73.33)	179 (93.72)	
Transwoman	24 (10.17)	12 (26.67)	12 (6.28)	
Sexual identity				**<.001**
Straight or heterosexual	156 (66.10)	21 (46.67)	135 (70.68)	
Lesbian, or homosexual	26 (11.02)	15 (33.33)	11 (5.76)	
Bisexual	46 (19.49)	7 (15.56)	39 (20.42)	
Not sure or Prefer not to answer	8 (3.39)	2 (4.44)	6 (3.14)	
Annual household income				**.005**
Less than $20,000	19 (8.30)	5 (11.11)	14 (7.61)	
$20,000 to $35,000	41 (17.90)	15 (33.33)	26 (14.13)	
$35,000 to $50,000	52 (22.71)	4 (8.89)	48 (26.09)	
$50,000 to $75,000	52 (22.71)	12 (26.67)	40 (21.74)	
$75,000 or more	65 (28.38)	9 (20.00)	56 (30.43)	
Level of education				.929
Less than High School	4 (1.69)	0 (0.00)	4 (2.09)	
High School graduate	23 (9.75)	5 (11.11)	18 (9.42)	
Some college	51 (21.61)	9 (20.00)	42 (21.99)	
College graduate or higher	158 (66.95)	31 (68.89)	127 (66.49)	
Student				.087
Not a student	171 (74.03)	26 (61.90)	145 (76.72)	
Full-time student	32 (13.85)	7 (16.67)	25 (13.23)	
Part-time student	28 (12.12)	9 (21.43)	19 (10.05)	
Employment status				**.008**
Unemployed	9 (3.83)	1 (2.22)	8 (4.21)	
Employed full-time	178 (75.74)	27 (60.00)	151 (79.47)	
Employed part-time	48 (20.43)	17 (37.78)	31 (16.32)	
Health insurance type				
Uninsured	18 (7.66)	3 (6.82)	15 (7.85)	
Public insurance only	95 (40.43)	22 (50.00)	73 (38.22)	
Private insurance only	104 (44.26)	17 (38.64)	87 (45.55)	
Public and private insurance	18 (7.66)	2 (4.55)	16 (8.38)	
Marital status				.093
Single/never married	76 (32.48)	20 (45.45)	56 (29.47)	
Married/cohabitating	127 (54.27)	17 (38.64)	110 (57.89)	
Separated	12 (5.13)	4 (9.09)	8 (4.21)	
Divorced	14 (5.98)	2 (4.55)	12 (6.32)	
Widowed	5 (2.14)	1 (2.27)	4 (2.11)	
Acculturation				.204
1-9 years	46 (20.81)	12 (28.57)	34 (18.99)	
10 years and above	175 (79.19)	30 (71.43)	145 (81.01)	

Statistically significant at p< 0.05 based on chi-square test Fisher's exact test

Table 2. Multivariable logistic regression analysis of association between willingness to use PrEP and sociodemographic characteristics (N= 236).

	AOR	90% CI
Age		
18-24	Ref	
25-34	**4.85*** **	**(1.71, 13.76)**
35 and above	3.06	(0.56, 16.60)
Gender		
Ciswoman	Ref	
Transwoman	**0.15****	**(0.03, 0.63)**
Sexual identity		
Straight or heterosexual	Ref	
Gay, lesbian, or homosexual	**0.09*** **	**(0.02, 0.41)**
Bisexual	3.63	(0.97, 13.52)
Not sure or prefer not to answer	2.39	(0.30, 19.24)
Annual household income		
$75,000 or more	Ref	
Less than $20,000	0.30	(0.07, 1.22)
$20,000 to $35,000	**0.23***	**(0.05, 0.95)**
$35,000 to $50,000	2.54	(0.68, 9.55)
$50,000 to $75,000	0.58	(0.18, 1.87)
Level of education		
College graduate or higher	Ref	
Less than High School or High School graduate	**4.16***	**(1.01, 17.36)**
Some college	**7.43*** **	**(2.07, 26.66)**
Student		
Not a student	Ref	
Full-time student	1.12	(0.32, 3.97)
Part-time student	**6.83****	**(1.46, 31.83)**
Employment status		
Unemployed	Ref	
Employed full-time	0.93	(0.10, 9.07)
Employed part-time	0.22	(0.03, 1.96)
Health insurance type		
Uninsured	Ref	
Public insurance	0.57	(0.10, 3.15)
Private insurance	0.61	(0.11, 3.43)
Public and private insurance	0.83	(0.08, 8.57)
Marital status		
Single/never married	Ref	
Married/cohabitating	1.37	(0.52, 3.59)
Separated	0.33	(0.08, 1.44)
Divorced or widowed	2.63	(0.43, 15.94)
Acculturation		
1-9 years	Ref	
10 years and above	1.18	(0.44, 3.15)

AOR= Adjusted Odds Ratio
90% CI= 90% Confidence Interval
Ref – Reference Group
$^{*}p \leq 0.10$, $^{**}p \leq 0.05$, $^{***}p \leq 0.01$, $^{****}p \leq 0.001$

Discussion & Implications

- Initial evidence concerning the preferences of Ghanaian immigrant women
- Most of the women are likely to use PrEP for prevention (high prevalence 80%)
- Oral pill preferred to other delivery modalities
- Transwomen, gays/lesbians, and people with household income of $20,000 to $35,000 were less likely to use PrEP
- Interventions geared towards women within this population may consider using client-centered approaches that considers women's preferences, needs, and values.

Future Directions

- More studies in this population are needed, especially qualitative studies, to explore reasons driving the preferences
- Longitudinal study is needed to assess temporal changes in PrEP use over time
- Expand the study to cover a larger sample of women to have statistical power to generative more representative findings

Limitations

- Ghanaians that do not speak English were not included in the study
- Small sample size - we may not be able to generalize our data to the larger Ghanaian community in the US
- Self-reported nature of the data; self-reported responses and social desirability biases might have resulted in underestimation of the findings
- Cross sectional study; we cannot make any causal inferences

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Thank you.

Questions? Comments?