Racial Inequity in Initiation of Semaglutide Therapy Among People with HIV in Care Across the US

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BACKGROUND

- Rates of obesity and metabolic conditions, such as type 2 diabetes mellitus (T2DM) are rising among people with HIV (PWH)
- Evidence indicates racial disparities in the utilization of semaglutide, a novel, effective treatment for obesity and T2DM, in the general US population

➢ **We examined predictors of receiving semaglutide prescription among PWH in the US with obesity and/or diabetes indications**

METHODS

- *Setting*: Centers for AIDS Research Network of Integrated Clinical Systems (CNICS) Cohort
  - CNICS is a 10-site cohort of adult PWH engaged in care at academic clinics across the United States
- *Observation Period*: 01/2019-12/2023
- *Participants*: PWH with ≥1 in timeframe and eligible for semaglutide therapy by BMI ≥30 kg/m^2 or HbA1c ≥6.5%

Exposure: *Race/ethnicity*: Self-reported as non-Hispanic White, non-Hispanic Black, Hispanic, or Other/Missing
Outcome: *Semaglutide prescription* within the observation period

- *Covariates* age, sex, CNICS site, housing status, maximum BMI, and maximum HbA1c
- *Analysis*: relative risk regression with Poisson family, overall and among specific indication groups:
  - BMI: ≥30 kg/m^2, ≥40 kg/m^2
  - HbA1c: ≥6.5%, ≥7.0%, ≥8.0%

N=11,617

Overall:
- Median age: 53 (IQR: 42-61)
- 74% male; 26% female
- 48% Black, 35% White

774 PWH (7%) received semaglutide
- 75% male, 25% female
- 36% Black, 41% White

Black PWH were *20% less likely to receive semaglutide* versus **White** PWH, despite greater indication for use

This was more pronounced among those with high HbA1c

RESULTS

Table 1. Association (Prevalence Ratio, PR) between race/ethnicity and receiving semaglutide among eligible PWH, adjusted for maximum BMI, age, sex, and CNICS site

Model	Race/ethnicity	N on semaglutide	PR (95% CI)	p-value
Everyone	White	315	Ref	
	Black	279	**0.80** (0.67-0.95)	0.01
	Hispanic	136	**0.84** (0.69-1.02)	0.08
	Other	44	**1.05** (0.78-1.41)	0.7
BMI ≥ 30 kg/m^2	White	287	Ref	
	Black	259	**0.82** (0.69-0.99)	0.03
	Hispanic	124	**0.81** (0.66-1.00)	0.049
	Other	39	**1.09** (0.80-1.49)	0.6
HbA1c ≥ 6.5%	White	187	Ref	
	Black	198	**0.65** (0.53-0.79)	<0.001
	Hispanic	76	**0.75** (0.58-0.96)	0.02
	Other	20	**0.63** (0.41-0.97)	0.04

RESULTS

- Associations remained more pronounced in models restricted to PWH with elevated HbA1c (≥8.0%):

Race/ethnicity	PR (95% CI)	p-value
White	Ref	
Black	**0.66** (0.53-0.83)	<0.001
Hispanic	**0.70** (0.53-0.93)	0.02
Other	**0.74** (0.47-1.16)	0.2

- In models restricted to PWH with BMI ≥ 40 kg/m^2, we did not observe a difference in semaglutide prescription:

Race/ethnicity	PR (95% CI)	p-value
White	Ref	
Black	**0.98** (0.75-1.29)	0.9
Hispanic	**0.87** (0.61-1.23)	0.4
Other	**1.15** (0.67-1.98)	0.6

LIMITATIONS

- We used pharmacy-level capture of semaglutide, thus do not have data on adherence
- Our approach cannot determine mechanism for the observed inequity in semaglutide treatment

CONCLUSIONS

- Black and Hispanic PWH received semaglutide treatment less frequently than their White counterparts
- Our findings were not driven by unequal severity of diabetes; Black PWH had higher average HbA1c values than other groups and made up 48% of the semaglutide-indicated group, but 36% of those who received
- This treatment gap may exacerbate existing inequalities and disproportionate comorbidity burden by race groups

ADDITIONAL INFORMATION

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