

The Relationship Between Modifiable Health Behaviors and Health Literacy in People with HIV is Complicated by Multiple Factors

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BACKGROUND

- People with HIV (PWH) who achieve viral suppression have a normal lifespan, however, they now contend with more cardio-metabolic disease and exaggerated rates of malignancies.
- The etiology of these disparate rates of comorbidities are multifactorial but likely include modifiable behaviors such as smoking, poor diet, obesity, and substance use.
- We created a multidisciplinary team to study health behaviors in PWH. The team included researchers and HIV clinics in three Louisiana cities; New Orleans, Baton Rouge, and Shreveport, forming the Louisiana Translational Collaborative on Health Behaviors [LATCH] network.
- The goal was development of a research network representative of diverse populations of Louisianans with HIV that will support multi-level, multi-disciplinary, multi-institutional projects addressing disparities in health.
- For this analysis, we hypothesized that patients with low health literacy would have higher BMIs and higher usage of tobacco and illicit drugs.

METHODS

- PWH aged ≥ 18 were recruited from three HIV clinics during regular appointments.
- Participants completed surveys using standardized tools that assessed diet, physical activity, health literacy, tobacco and substance use. Weight and height were also recorded.
- Redcaps was used for data collection and SPSS was used for data analysis.

RESULTS

- 100 PWH were enrolled at the time of the analysis.
- Most were African American (80%), men (57%), and the mean age was 50.72. Demographics are presented in Table 1.
- Outcomes are presented in Table 2. The only outcome that was significant was those with low health literacy had a lower BMI.

RESULTS

Table 1: Demographics

Baseline Characteristics (n=100)	Percentage
African-American	80%
White	14%
Male (cis)	57%
Female (cis)	38%
Age (mean)	50.7 Range 21- 70
BMI (mean)	30.2 Range 18 - 51
Limited Health Literacy (Realm <7)	50%
Past Month Drug Use	24%
Lifetime Tobacco Use	59%
Current Tobacco Use	31%
Diagnosed with Diabetes	21%
Diagnosed with High Blood Pressure	52%
Diagnosed with a mood disorder (depression, anxiety, bipolar)	37%

Table 2: Outcomes

	Percentage with Low Health Literacy (Realm <7)	Percentage with adequate Health Literacy (Realm 7+)	P-Value
BMI	29.3	30.6	P<.001
Current Tobacco Use	27.1%	36.7%	P=.68
Current (Past Month) Drug Use	25%	24.5%	P=.59

CONCLUSIONS

- We hypothesized that PWH with lower health literacy would have higher BMIs, be more likely to be a current smoker and more likely to use drugs in the past month, which we did not find.
- We found those with higher health literacy had a statistically higher BMI (30 versus 29), although practically this difference is not clinically significant.
- We also found higher rates of smoking among those with higher health literacy although it was not significant (27 versus 37%).
- No differences were seen in past month drug use.
- Health literacy did not directly impact modifiable health behaviors in our cohort. This may be due to many other factors confounding health outcomes, including sociodemographic factors such as income and education as well as community and neighborhood factors such as high rates of obesity, tobacco and drug use.
- While our study did not bear out the findings we expected, there is significant data in the general population that poor health literacy results in poorer health outcomes (DeWalt et al, JGIM, 2004 19(12), review of 44 papers on the topic). This is due to individuals being best able to maintain and protect their health when they can understand and accurately assess basic health information.

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