

BACKGROUND

- People with HIV (PWH) report higher levels of trauma than the general population, with rates from 40 to 90% (1,2).
- Higher rates of traumatic exposure correspond with higher rates of Post-traumatic Stress Disorder (PTSD) in this population, with rates of PTSD in PWH estimated to be between 30 and 74% (3).
- Up to 64% of PWH endorse PTSD symptoms directly related to their HIV diagnosis (3).
- Our team recently enhanced Cognitive Processing Therapy (CPT), an evidence-based treatment for PTSD, with Lifesteps (L), an HIV medication adherence intervention, to create CPT-L to address PTSD and HIV outcomes.
- The purpose of the current study is to report on preliminary HIV stigma and PTSD findings among a small sample participating in a pilot randomized controlled trial comparing CPT-L to Standard of Care (SOC).**

METHODS

- PWH (N=41; Mean age=44.8; SD=12.3) who had experienced at least one traumatic event with current PTSD symptoms were recruited from local Ryan White HIV care clinics.
- Participants were randomized at baseline to received CPT-L or SOC and completed validated assessments of PTSD (Clinician Administered PTSD Scale for DSM-V/CAPS) and HIV stigma at baseline and at 6-week post-baseline.

Demographics

	Overall	CPT-L	LifeSteps
Age	44.8 (12.3)	49.1 (11.8)	40.8 (11.6)
Race			
Black	61.0% (25)	55.0% (11)	66.7% (14)
White	29.3% (12)	40.0% (8)	19.1% (4)
MTO/Other	9.8% (4)	5.0% (1)	14.3% (3)
SABV			
Male	63.4% (26)	65.0% (13)	61.9% (13)
Female	36.6% (15)	35.0% (7)	38.1% (8)

METHODS

- We assessed changes in clinician and participant-rated PTSD severity between CPT-L and SOC during study treatment and explored race and biological sex as possible treatment moderators. Data are presented as means and associated standard errors at study baseline, end of treatment (week 6) and the change between.
- Within group changes and between group differences are presented as Cohen's d values.
- Although not specifically powered to detect statistical effects, univariable and multivariable regression models were utilized to determine significance of main effects and interactions of interest.

Retention to week 6 PTSD scores from baseline.

	Baseline	Week 6	Retention %
Overall	41	28	68.3%
CPT-L	20	11	55.0%
Lifesteps	21	17	80.9%

RESULTS

- Following 6 weeks of study treatment, participants in the CPT-L group showed significant decreases in clinician rated PTSD severity (CAPS: CPT-L $\Delta=-17.7$, SE=2.4 vs. SOC $\Delta=-6.2$, SE=4.0; Cohen's d=1.0).
- Statistical models noted that evidence of differential effect of sex on treatment outcomes by treatment group were present, indicating that males receiving CPT-L had a significantly greater decrease in CAPS as compared to females receiving CPT-L (Males $\Delta=-25.3$, SE=4.2 vs. Females $\Delta=-8.6$, SE=4.7; d=1.61) while the sex difference in the SOC group was null (d=0.06).
- Participants identifying as Black had significantly greater decreases in CAPS scores during treatment as compared to all other races (Black $\Delta=-13.8$, SE=2.8 vs. All Others $\Delta=-6.0$, SE=3.9; d=0.65), though this did not vary between treatment groups.
- Changes in HIV stigma total score from baseline to week 6 reached a Cohen's d of .97 within the CPT-L group but the between group difference was not significant ($\Delta=6.22$, SE=5.55, Cohen's d=0.43, p=.273).

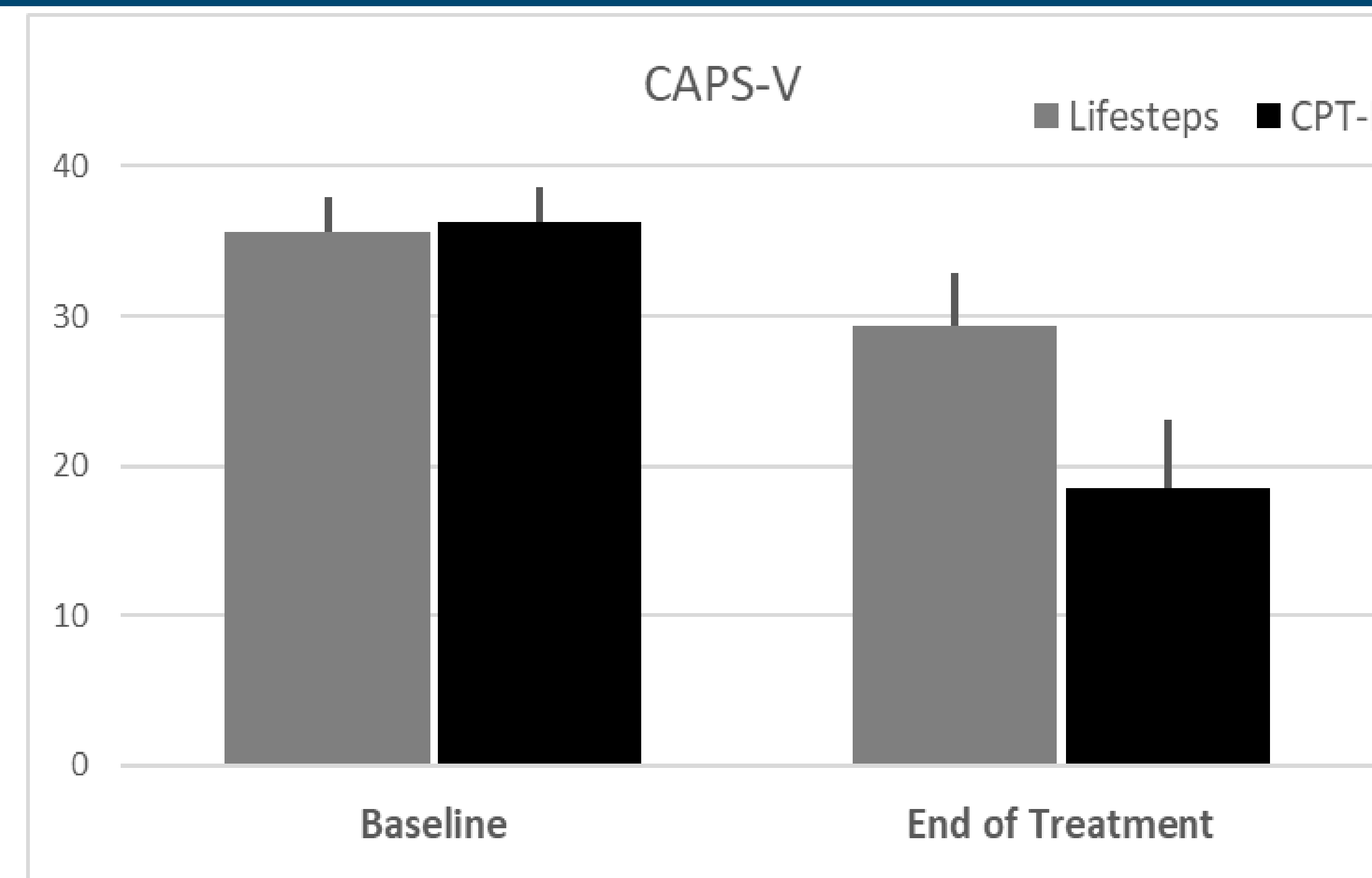


Figure 1. PTSD by Treatment Condition from Baseline to 6-Weeks Post-Baseline

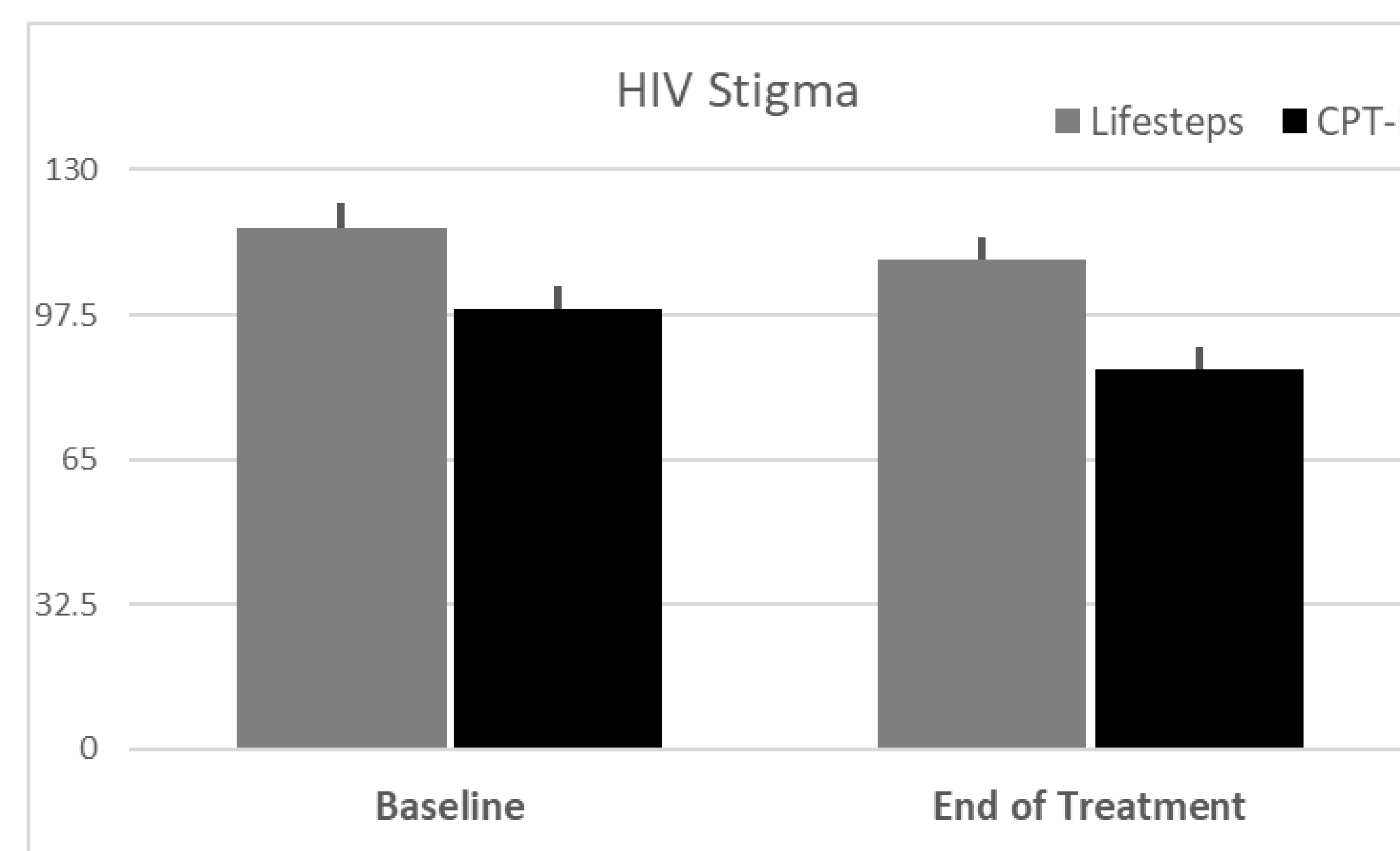


Figure 2. HIV Stigma by Treatment Condition from Baseline to 6-Weeks Post-Baseline

CONCLUSIONS

- The results of this preliminary study suggest CPT-L can be used as a tool to reduce PTSD and HIV stigma in PWH, particularly among males and Black people. Findings support the national U=U campaign (Undetectable + Untransmittable) to address HIV stigma and empower PWH.
- The impact of race and gender on CPT-L treatment should be further studied in a larger sample of people to ensure accurate results.
- Future research directions should explore ways in which physicians who work with PWH can best integrate CPT-L into their practices to promote a larger scale impact in the reduction of PTSD and HIV stigma, and, ultimately, improvement in HIV health outcomes.

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