

Assessing Adverse Childhood Experiences (ACEs) in a HIV Primary Care Clinic: A Pilot Project in Quality Improvement

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BACKGROUND

- Adverse childhood experiences (ACEs) are common, and ≥ 4 ACEs are associated with negative health outcomes in adulthood¹
- History of childhood trauma has been associated with increased mortality in people living with HIV (PLWH)
- Screening for childhood trauma is not routinely performed in PLWH

METHODS

Objectives:

- Quantify the burden of childhood trauma, as measured by ACEs
- Improve linkage to mental health care via referral

Hypothesis: Prevalence of ≥ 4 ACEs in PLWH is $>21\%$, the prevalence reported in the general population of Philadelphia.²

Target population: PLWH attending appointments at an academic infectious disease clinic between October 2018 and February 2019

Survey features:

- ACEs 10-question survey³, patient health questionnaire (PHQ-9) and primary care post-traumatic stress disorder (PC-PTSD) score
- Engagement with mental health services
- Survey acceptability

Participants with ≥ 4 ACEs were referred to on-site counselor or behavioral health specialist

All participants were provided with a list of crisis resources

RESULTS

- 20 participants completed surveys, including 75% men, 85% gay/bisexual, with median age of 44.5 years [35.8-52.2]
- Median ACEs score was 4.5 [IQR 3-7] with 60% reporting ≥ 4 ACEs (Fig. 1)
- Guardian substance abuse/mental illness was most common; $>50\%$ reported verbal and sexual abuse (Fig. 2)

Figure 1. ACEs Score

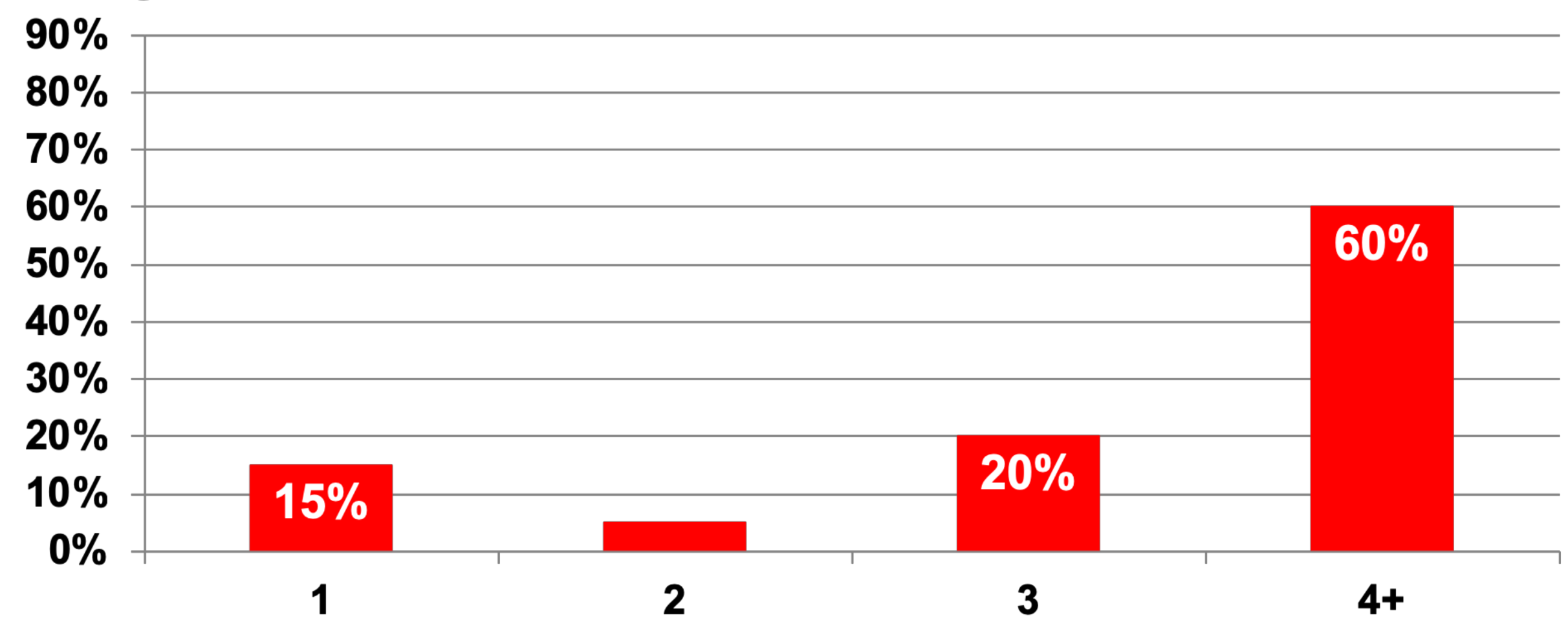
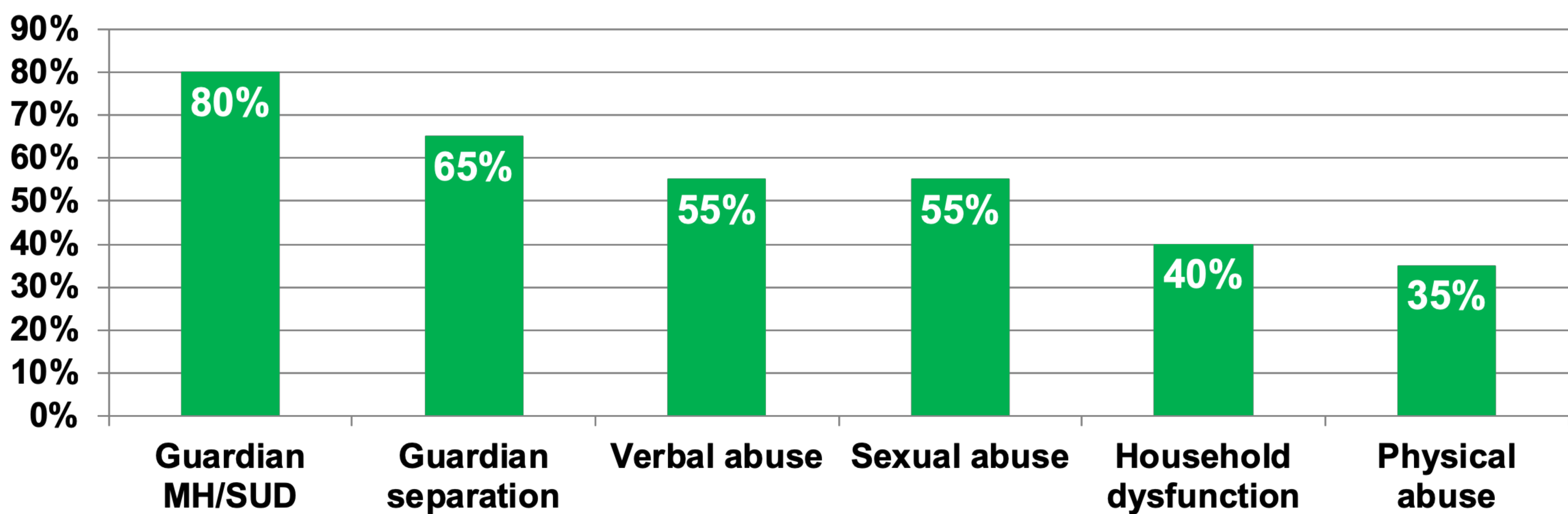
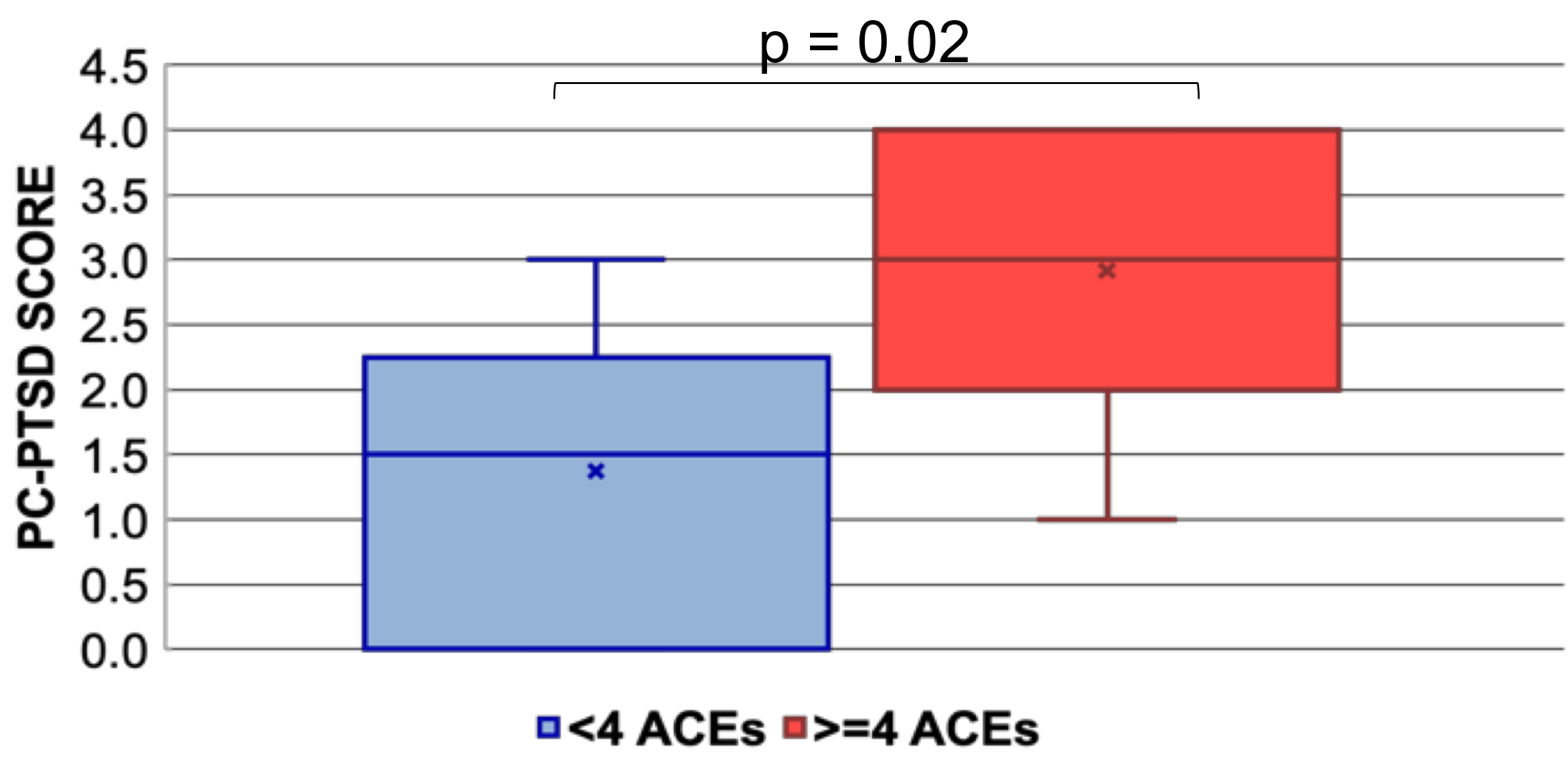


Figure 2. ACEs Prevalence by Category



- 50% of participants had a positive PC-PTSD screen (≥ 3) while 67% had moderate depression or greater (≥ 10) on the PHQ-9^a
- PC-PTSD scores were higher for ≥ 4 ACEs than <4 ACEs (Fig. 3)
- Survey acceptability was “good” on a 5-point scale “very bad” to “very good”
- 85% of individuals had ever engaged in mental health care

Figure 3. Median PC-PTSD scores by ACEs score



DISCUSSION

- Prevalence of ≥ 4 ACEs among PLWH was 3 times higher than that reported for the local general population
- ACEs are not assessed in routine mental health screening tools, highlighting need for trauma-specific screening
- ACEs survey was well-received by participants; however, most were actively engaged in mental health care, limiting opportunity for new linkage
- Further understanding of the impact of childhood trauma on retention in care and control of HIV is needed

Footnotes: ^aPHQ-9 completed for 9 participants.
References: 1) Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American journal of preventive medicine*, 14(4), 245-258. 2) Cronholm, P. F., Forke, C. M., Wade, R., Bair-Merritt, M. H., Davis, M., Harkins-Schwarz, M., Pachter, L.M., & Fein, J. A. (2015). Adverse childhood experiences: expanding the concept of adversity. *American journal of preventive medicine*, 49(3), 354-361. 3) Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Questionnaire*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2017.