

# Katelyn Lamberton<sup>1</sup>, Amanda Millar, MSS<sup>3</sup>, Shengh Xiong, BS<sup>3</sup>, Jessica Kenny, PhD<sup>2,3</sup>, & Ayelet Talmi, PhD<sup>2,3</sup>

<sup>1</sup>The Psychiatry Undergraduate Research Program and Learning Experience (PURPLE), <sup>2</sup>Children's Hospital Colorado, <sup>3</sup>Department of Psychiatry, University of Colorado Anschutz Medical Campus

### Introduction

- Nationally, 60.3% of youth with major depression do not receive needed mental health treatment (Reinert & Nguyen, 2021).
- Early screening and intervention for depression in primary care leads to better overall mental and physical health outcomes (Costello et. al., 2019; Davis et. al., 2023; Kenny et. al., 2021).
- The American Academy of Pediatrics (AAP) recommends utilizing depression screeners, such as the Patient Health Questionnaire 9-item modified for Adolescents (PHQ-9A), as a crucial way to intervene and mitigate mental health crises (Costello et. al., 20 Davis et. al., 2023; Kenny et. al., 2021).
- Studies suggest that trauma and adversity may impact depressi in adolescents, making it crucial to identify these factors in integrated primary care settings (Kenny et. al., 2021; Campbell al., 2024).
- However, trauma and adversity may not be sufficiently assessed by Primary Care Providers (PCPs) to properly understand the impact of these important areas of psychosocial functioning in a child's life (Campbell et. al., 2024).

### **Objectives**

- Examine the prevalence of reports of trauma and/or adversity in a sample with elevated PHQ-9A scores.
- 2. Explore actions taken by the behavioral health team after trauma and/or adversity was disclosed.
- 3. Identify strategies for primary care settings to respond to adolesce reports of trauma and/or adversity.

### **Methods and Procedure**

- Project CLIMB (Consultation Liaison in Mental Health and Behavior) provides integrated behavioral health services to child and families seen in an urban residency training pediatric primary care clinic.
- Study population: 2,107 adolescents, aged 11-18, completed PHC 9A over the course of the 2017-2018 study.
- Of these, 277 of these patients had at least one elevated PHQ-9A (elevated = a PHQ score > 10 or item #9 was positive), and 78/27 patients had at least one mention of trauma in their charts.
- To assess adversity, a psychosocial screener was used to examine caregiver and family barriers to patient care and well-being, with 37/277 patients endorsing one or more items positive on the screener.
- Traditional content analysis was employed to code interventions by PCPs and CLIMB for elevated PHQ-9A scores, as well as themes of trauma and adversity found in patient charts. The qualitative codes were then converted into quantitative results.
- Chi-square tests were utilized to evaluate the relationship between actions/recommendations made by PCPs and CLIMB when trauma or adversity was present and not present.

### **Silent Struggles: Examining Trauma & Adversity** University of Colorado Anschutz Medical Campus in the Context of Adolescent Depression

	Table 1. Demographics and SampleCharacteristics		Table 2: Trauma and Adversity Themes   in Patient Charts	
5	Sample	N = 277	Trauma	N = 78
,	Age of Child (M, SD)	13.19 (1.68)	"Scary" Event*	24 (30.8%)
	Gender Male Female	133 (40.8%) 164 (59.2%)	Domestic Violence Incarceration of Parent	6 (13.6%) 7 (15.9%)
	Ethnicity Latino Non-Latino	155 (56.0%)	Suicide Attempt Contentious Separation Attacked or Robbed	6 (13.6%) 6 (13.6%) 4 (9.1%)
)19;	Not-reported/unknown Race	5 (1.8%)	Abuse* Physical	11 (14.1%) 9 (37.5%)
	American Indian/Pacific Islander Asian	1 (0.4%) 5 (1.8%)	Sexual	5 (20.8%) 10 (41.7%)
l et.	Black/African American	55 (19.9%) 70 (28 5%)	Death Multiple	12 (15.4%) 17 (21.8%)
ed	More than one race	32 (11.6%)	Unknown	14 (17.9%)
	Other/Unknown Primary Language English	105 (37.9%) 193 (67.9%)	Adversity Trouble keeping up with child's healthcare needs	N = 37 5 (6.9%)
	Spanish Other	79 (28.5%) 5 (1.8%)	Financial Stress	14 (19.4%)
	Insurance		Food Insecurity Need Benefits Connection	11 (15.3%) 9 (12.5%)
a	Public Private/Other	246 (88.8%) 31 (11.2%)	Child's Education	7 (9.7%)
	PHQ-9A PHQ-9A Score (M, SD) O9 Positive	12.09 (4.38) 140 (50.5%)	Fears of Child Safety Caregiver feeling sad, hopeless,	1 (1.4%)
ent	Adversity Screen Resource Needs	<b>37 (13.4%)</b> 37 (13.4%)	or anxious Adversity mentioned, type not	3 (4.2%)
	Behavioral Health Needs Trauma Indicated	7 (2.5%) 78 (28,2%)	Specified Adversity coded but not	10 (13.9%)
	PCP Documented	12 (4.3)	documented in patient chart	6 (8.3%)
	CLIMB Documented Both Documented	62 (22.4%) 4 (1.4%)	False Positive *Some patients presented to clinic with mult	1 (1.4%) tiple "scary events" or types of abuse.
ren	Figure 1. PCP and CLIMB Interventions for Patients with			
_	Elevated PHQ-9A Scores			
א-	PCP: Referred to CLIMB**			
7	PCP: Counseled family without CLIMB*			
	CLIMB: Parent Involvement in Discussion*			

CLIMB: Conducted Risk Assessment\*\*

CLIMB: Created a Safety Plan\*

CLIMB: Return to Clinic\*

CLIMB: Outside MH Resource\*

CLIMB: Discuss Bullying\*

\*p < 0.05 \*\*p < .001

10%

Trauma or Adversity Present



### **Future Directions**

# Acknowledgements

Dr. K. Ron-Li Liaw, Chair of PMHI, Dr. Neill Epperson, Chair of Department of Psychiatry, Dr. Dominic Martinez, Dir. Office of Inclusion and Outreach, CCTSI, Dr. Merlin Ariefdjohan, PURPLE Program Founder and Faculty Advisor. This poster is supported by the Health Resources & Services Administration (HRSA) of

HRSA, HHS, or the U.S. Government. For more information, please visit www.HRSA.gov. This research was approved by the Colorado Multiple Institution Review Board and generously funded with State and philanthropic dollars. The authors are grateful to the families, staff, and providers in the Child Health Clinic and the CLIMB team for ongoing contributions and support.

If you have any questions or comments, please contact me at Katelyn.Lamberton@ucdenver.edu.

### **Results and Conclusions**

• In a sample of adolescents with an elevated depression screener:

**Trauma** was documented in 78 (28.2%) patient charts. Out of all the types of trauma mentioned in the charts, "scary" events were the most common. Specifically, bullying was the most frequently mentioned "scary" event.

**Adversity** was documented in 37 (13.4%) patient charts. The most common forms of adversity in the patient charts were financial stress and food insecurity.

When trauma or adversity were present, PCP and CLIMB recommendations aligned with expected clinical actions.

When trauma or adversity were present, **PCPs** were more likely to refer patients to CLIMB and were less likely to **counsel patients** without consulting CLIMB.

When trauma or adversity were present, **CLIMB** was more likely to conduct a risk assessment and refer patients to an outside mental health resource.

When trauma or adversity were present, **CLIMB** was more likely to discuss instances of **bullying**.

Improving the accuracy of PCP documentation when trauma is reported or when patients screen positively for adversity is important.

In patient visits when assessing for past trauma, explaining what "trauma" means is crucial for accurate patient-provider communication.

Due to clinical significance and importance of trauma informed care, providers should ensure that trauma screening is completed.

Adding data from a newly coded 2022 dataset would help improve understanding of the relationship between adolescent depression and trauma or adversity.

Dr. Ayelet Talmi, Dr. Jessica Kenny, Amanda Millar, Shengh Xiong.

Shanna Trott, Yunliang (Lily) Luo, Directors of the PURPLE Program.

the U.S. Department of Health & Human Services (HHS). The contents are those of the author and do not necessarily represent the official views of, nor an endorsement, by

# **Contact Information**