Social determinants of health: Predictors of Cognitive Processing Therapy engagement, outcome, and dropout in a diverse community health center

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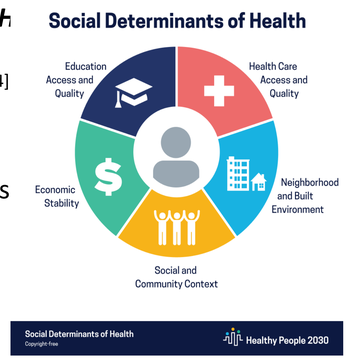
BACKGROUND

Treatment Effectiveness

- There is heterogeneity in the effectiveness of evidence-based PTSD treatment, especially in diverse community settings.[1]
- Patient demographics have been used to understand this variability, but with mixed results. [2-3]

Social Determinants of Health (SDOH

- SDOH are the conditions of the environment where people live. [4]
- SDOH-related factors
- impact PTSD treatment utilization among veteran samples and may impact treatment outcomes. [6-8]
- Examining the impact of SDOH on treatment outcome and engagement is vital to improve outcomes in community settings.

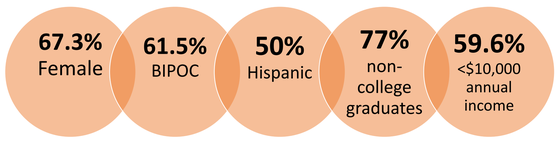


Study Aim: To explore the relation of patient-level SDOH to treatment outcome and engagement

METHODS

Participants

- Adults (N=52) with primary PTSD
- Receiving care from providers (N=19) treating patients as part of an NIMH funded hybrid study



Intervention

Cognitive Processing Therapy (CPT)

- 12-session manualized treatment protocol
- Delivered as part of NIMH-funded hybrid study
  - CPT Manual adapted to be appropriate for low-income, diverse patient population[9]
- Treatment delivered in English and Spanish

METHODS Cont.

Measures

- PTSD checklist for DSM-5 (PCL-S)
- Patient-level SDOH:
  - Barriers to Treatment Questionnaire (e.g. logistic/financial, stigma/ shame/ discrimination)
  - Session level language

Data Analysis

- Multiple linear and logistic regression were used to determine the impact of patient-level SDOH on treatment engagement
- Latent growth curve modeling explored whether patient-level SDOH influenced PTSD symptom trajectories

RESULTS

Client-Related Predictors of Treatment Engagement

Predictors	Number of weeks in study Estimate (95% CI)	Number of sessions with repeated content Estimate (95% CI)	Dose of CPT Estimate (95% CI)	Frequency of **sessions Estimate (95%CI)**	Consistency of **sessions Estimate (95%CI)**
Session language	0.95 (−1.48 to 3.37)	**1.42** (0.50 to 2.35)**	−3.39 (−21.12 to 14.33)	1.14 (−1.33 to 3.60)	2.21 (−2.21 to 6.62)
Employment history	0.74 (−2.14 to 3.63)	−0.90 (−2.00 to 0.20)	13.33 (−7.97 to 34.62)	0.52 (−2.38 to 3.41)	0.74 (−4.41 to 5.88)
MQLI	−0.43 (−1.12 to 0.26)	**−0.28* (−0.55 to 0.01)**	−1.11 (−6.06 to 3.84)	−0.46 (−1.21 to 0.28)	−0.69 (−1.98 to 0.60)
BTQ-L/F subscale	−0.19 (−1.02 to 0.64)	0.19 (−0.13 to 0.50)	−3.28 (−9.39 to 2.84)	−0.71 (−1.53 to 0.12)	−1.04 (−2.53 to 0.45)
BTQ-S/D subscale	0.01 (−0.17 to 0.19)	−0.01 (−0.08 to 0.06)	0.31 (−1.03 to 1.65)	0.01 (−0.17 to 0.19)	−0.02 (−0.34 to 0.30)
BTQ-P/S subscale	−0.02 (−0.45 to 0.41)	0.07 (−0.10 to 0.23)	−0.84 (−4.00 to 2.31)	0.11 (−0.32 to 0.54)	0.20 (−0.57 to 0.97)
BTQ-L/F x session language interaction	−0.01 (−0.55 to 0.53)	−0.13 (−0.33 to 0.08)	0.99 (−2.95 to 4.93)	**0.65* (0.11 to 1.19)**	**1.02* (0.03 to 2.01)**

RESULTS Cont.

Impact of Treatment Engagement Factors on PCL Score

Treatment engagement factors	Growth Factors for PCL-S Scores: Direct effects of intercept on treatment engagement factors	Direct effects of treatment engagement factors on linear slope	Direct effects of treatment engagement factors on quadratic term
Predictors			
Session language	β=−0.20	β=−0.15	β=0.31
BTQ-L/F subscale	β=0.22	β=0.23	**β=−0.62***
Employment history	β=−0.09	β=0.33	β=0.33

- Spanish-speaking clients were more likely to repeat session content, repeating **1.4 sessions more** than English speakers.
  - Spanish speakers with more logistical/financial barriers during treatment attended treatment less frequently, less consistently.
- Greater baseline logistical/financial barriers predicted a deceleration in changes in PCL-S over time for all patients.

CONCLUSIONS

- Client-level SDOH predict PTSD treatment outcome and engagement.
  - Client language in particular impacts treatment engagement.
  - Logistical/financial barriers impact treatment outcome.
- Exploring the economic impact of systemic racism that result in greater logistical/financial-related SDOH is a vital future target to ameliorate disparities in treatment outcome and engagement.

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