Effects of multifaceted socioeconomic failures on mental health in children: A case report

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INTRODUCTION

- Socioeconomic determinants and medical stressors have largely been associated with mental health persisting into adulthood (1).
- Social stressors and home environment are often found with lower SES (4), and are found to have a negative impact on mental health, starting as young as 18 months (2,3).
- Interaction between multiple factors place a greater risk in a child population and are not as studied in lower SES groups (4).
- This case illustrates the potential negative effects of socioeconomic factors and failed interventions on mental health in a child/adolescent.

CASE

- 14 year old African-American, ward of the state, girl who presented from residential facility for aggressive and self-injurious behaviors, in the setting of failed outpatient management.

Social History:
- Ward of the State
- Found by authorities living at home with her siblings in a home with faces and elevated lead levels
- Traveled at multiple residential facilities with behavioral issues

Family History
- Unknown

Medical History

- COVID-19
- Iron deficiency anemia
- Anemia
- Obesity

Developmental:
- Largely unknown
- Mother reportedly used substances and alcohol during pregnancy.
- Delayed schooling

Prior to Admission
- Medications: haloperidol 1 mg TID, valproic acid ER 1250 mg QHS, clonazapine 1 mg TID, quetiapine 200 mg qAM, valproic acid 400 mg nightly, melatonin 10 mg nightly

CASE PRESENTATION

- Mental Status Exam
  - Patient was guarded, and avoidant. Minimally reactive to conversation. Poor concentration was noted as well as poor insight and judgment
  - Labs: Lipid, CMP, CBC, PRL WNL. Valproic acid level 97.2
  - Diagnosis:
    - Post-traumatic stress disorder, chronic
    - Attention deficit hyperactivity disorder combined type
    - Intellectual Disability, mild
    - Disinhibited social engagement disorder, rule out
    - Specific learning disability, reading (by history)
    - Upon initial hospitalization, patient required multiple seclusions and restraints for aggressive behaviors, largely prompted by conflict with peers and authority figures. She then displayed regressive behaviors with ADLs

DISCUSSION

- Elevated Lead levels
- Abusive risk factors
- Impoverished family
- Increases risk of mental health burden

- Educational neglect
- Parentification: needs to assert self-care for mental health
- Difficulty understanding others
- Difficulty maintaining friendships
- Poor concentration
- Difficulty coping with rejection (responds with aggression)

- Inadequate housing
- Hypervigilance
- Intermittent parenting
- Poor impulse control to environmental stimuli
- Self-harming behaviors

CONCLUSION

- Complex interactions between socioeconomic variables have a large impact on mental health in a child and adolescent population.
- Such effects can lead to increases in behavioral disturbances and aggression, particularly in response to failed social interactions (5).
- Child and adolescents in a lower socioeconomic class who experience physical and emotional trauma are at a much higher risk for mental health complications, with few supporting resources available (4).
- Advancement through socioeconomic indicators such as household income, parental education, and social support can reduce the mental health burden in child and adolescent population (4).
- Child and adolescents who are exposed to multiple childhood adverse experiences are likely at risk for abnormalities in enduring stress related biological systems, including inflammation and metabolic markers, resulting in mental health burden (7).
- Interventions and and reduction of social inequality through initiatives and policies can help address mental health concerns

References