Social Determinants and their Impact on Childhood Mental Health

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OBJECTIVES

• Briefly review the definition and manifestations of trauma
• Discuss social determinants and their relationship to trauma
• Define Toxic Stress and its long-term impacts
• Discuss resilience factors, trauma-informed practices, and considerations for policy change
MENTAL HEALTH vs. MENTAL ILLNESS

• Mental Health
  • “A state of [cognitive, emotional, and behavioral] wellbeing in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community.”
    • World Health Organization (WHO)

• Mental Illness
  • Diagnosable health conditions, according to DSM Criteria, that involve changes in cognition, emotion, or behavior and cause distress and/or functional impairment

WHAT IS TRAUMA?

• A frightening, dangerous, or violent event or circumstance
  • Threatens life or emotional or body integrity
• Can have long-lasting, adverse effects on
  • Learning
  • Relationships
  • Well-being
    • Mental
    • Physical
    • Social
    • Emotional
    • Spiritual
RESPONSES TO TRAUMATIC EVENTS

• Fear, terror, horror
• Anger, rage
• Aggression, violence
• Guilt, shame, self-blame
• Physical / physiologic symptoms
• Loss of control, powerlessness
• Shock, dissociation

WHAT IS TRAUMA TO YOU?

• Physical abuse
• Sexual abuse
• Emotional abuse
• Physical neglect
• Emotional neglect
• Household mental illness
• Household substance use
• Single-parenthood
• Household incarceration
• Domestic violence
WHAT ARE SOCIAL DETERMINANTS OF HEALTH / MENTAL HEALTH?

- Childhood experiences
- Housing
- Education
- Social support
- Family income
- Employment
- Our communities
- Access to health services

PITTSBURGH: A CITY OF TWO TALES
PITTSBURGH - A CITY OF TWO TALES

- **WalletHub**
  - Pittsburgh topped the list of best cities for football fans
- **Livability.com**
  - Pittsburgh named one of the Top 100 Best Places to Live
- **The Economist Intelligence Unit**
  - 3rd most livable city in the United States
- **The Economist of London**
  - 2nd Most Livable City in the Continental US
- **Lending Tree**
  - Pittsburgh is ranked among the top 3 best cities in the US for first-time homebuyers
- **Zillow**
  - #1 city for the most affordable rent
- **LinkedIn’s Economic Graph team**
  - 7th best city in the US to launch a career

“Pittsburgh’s Inequality Across Gender and Race”

- **Black women in Pittsburgh**
  - Higher rates of maternal mortality
  - Higher poverty
  - Lower rates of employment
  - Lower rates of college readiness
- **Black men in Pittsburgh**
  - Higher rates of occupational segregation
  - Higher rates of homicides
  - Higher rates of cancer
  - Higher rates of cardiovascular disease
FROM THE AUTHOR

“What this means is that if Black residents got up today and left [Pittsburgh] and moved to the majority of any other cities in the U.S., automatically by just moving their life expectancy would go up, their income would go up, their educational opportunities for their children would go up, as well as their employment.”

- Junia Howell, Assistant Professor of Sociology, University of Pittsburgh
SOCIAL DETERMINANTS: POVERTY

Population: ~300K
Demographics: ~23% AA
Median household income:
Whites: $59K
Blacks: $30K
Poverty: ~40% of AA women
SOCIAL DETERMINANTS: POVERTY

- Poverty increases stress
- Bidirectional relationship between mental illness and poverty
- Social, emotional, and behavioral issues inversely related to SES
- Unsafe housing / housing insecurity
- Poor access to healthy food
- Limited resources in public schools
- Fear of violence, crime, drug use
- Stressful home environments not conducive to learning

SOCIAL DETERMINANTS: EDUCATION

<table>
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<tr>
<th>Rank</th>
<th>School district</th>
<th>County</th>
<th>Rank 2020</th>
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<th>Enrollment 2018 - 20</th>
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<td>$175,885,519</td>
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88 Pittsburgh Public Schools  Allegheny  88  $665,600,000  22,934
89 Highlands School District  Allegheny  90  $45,370,185  2,520
90 Big Beaver Falls Area School District  Beaver  87  $30,240,371  1,710
SOCIAL DETERMINANTS: EDUCATION

A+ Academics
A+ Teachers
A+ Clubs & Activities
A+ Administration
A+ Food
C+ Diversity
A+ College Prep
A+ Health & Safety
B+ Sports
A+ Resources & Facilities

Fox Chapel; Source: https://www.niche.com/k12/d/fox-chapel-area-school-district-pa/

SOCIAL DETERMINANTS: EDUCATION

A+ Academics
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Mount Lebanon; Source: https://www.niche.com/k12/d/mt-lebanon-school-district-pa/
## SOCIAL DETERMINANTS: EDUCATION

Pittsburgh Public; Source: https://www.niche.com/k12/d/pittsburgh-public-schools-pa/

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<td>Resources &amp; Facilities</td>
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### Key Points

- Preschool expulsion rates are 89% higher when there’s no regular access to psychiatrist or psychologist.
- Being at risk for mental health problems in 1st grade leads to a 5% drop in academic performance in just two years.
- Special education students are suspended/expelled at higher rates.
- Fewer years of education → poor health → shorter lives.
- Low education → increased crime
  - 68% of state prison inmates did not complete high school.
SOCIAL DETERMINANTS: EMPLOYMENT

- Having the opportunity to work is critical for staying out of poverty
- Employment provides sense of self-efficacy and control
- In Pittsburgh, Black women make $0.54 for every White man’s $1.00
- Black men in Pittsburgh are more likely to be unemployed and actively looking for work
SOCIAL DETERMINANTS: EMPLOYMENT

- Anti-Drug Abuse Act of 1986
  - 5-year mandatory minimum sentence
    - 5 grams of crack cocaine
    - 500 grams of powder cocaine
- Many companies disqualify convicted felons from job opportunities
- In many states, felons don’t qualify for government assistance
- Unemployment has a direct relationship with recidivism

SOCIAL DETERMINANTS: CHILDHOOD EXPERIENCES – Stress

- Positive
  - Brief, mild hormonal elevations
- Tolerable
  - Serious but temporary hormonal elevations
  - Buffered by supportive relationships
- Toxic
  - Prolonged activation of stress response
  - No buffer or protective relationships
SOCIAL DETERMINANTS: CHILDHOOD EXPERIENCES – Toxic Stress

• Response to “strong, frequent, and/or prolonged adversity” in the absence of adequate support
• Related to attachment
• Overstimulation of the body’s natural stress response
  • Altered DNA expression
  • Altered brain development

SOCIAL DETERMINANTS: CHILDHOOD EXPERIENCES

■ Brains are built over time
  – Prenatal to adult
■ Majority in earliest years
  – 90% adult volume by age 3 years
■ Genes + Environment

The Developing Brain

• Brains are made of nerve cells or neurons.
SOCIAL DETERMINANTS: CHILDHOOD EXPERIENCES

Timed and Sensitive Periods

C.A. Nelson (2000). Credit: Center on the Developing Child
SOCIAL DETERMINANTS: CHILDHOOD EXPERIENCES

Toxic Stress

Persistent Stress Changes Brain Architecture

Normal

Typical neuron—many connections

Toxic stress

Damaged neuron—fewer connections

Prefrontal Cortex and Hippocampus

SOCIAL DETERMINANTS: CHILDHOOD EXPERIENCES – Toxic Stress

- Executive function deficits
  - Attention Deficit Hyperactivity Disorder
  - Impulse-Control Disorders
    - Disruptive Behavior Disorders
    - Emotional Dysregulation
    - Substance Use Disorders
- Cognitive Delays

SOCIAL DETERMINANTS: CHILDHOOD EXPERIENCES - ACEs

Adverse Childhood Experiences

Traumatic events that can have negative, lasting effects on health and wellbeing

- Abuse
  - Emotional abuse
  - Physical abuse
  - Sexual abuse
- Neglect
  - Emotional neglect
  - Physical neglect
- Household Challenges
  - Domestic violence
  - Substance abuse
  - Mental illness
  - Parental separation/disruption
  - Incarceration

People with 6 ACEs can die 20 yrs earlier than those who have none

1/3 of the population have at least 1 ACE

67% of the population have more than 4 ACEs

4 or more ACEs

3x the levels of lung disease and adult smoking
11x the level of intravenous drug abuse
4x as likely to have begun intercourse by age 15
4.5x more likely to develop depression
2x the level of liver disease

Adverse childhood experiences are the single greatest unaddressed public health threat facing our nation today

Dr. Robert Anda, former President of the American Academy of Pediatrics

67% of the population have at least 1 ACE

Adverse Childhood Experiences

- Social, Emotional
- Cognitive Impact
- Disrupted Neurodevelopment
- Disrupted Health and Behavioral Outcomes
- Disrupted Education and School Performance
- Disrupted Employment
- Disrupted Relationships
WHAT IS TRAUMA TO YOU?

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• Household substance use
• Single-parenthood
• Household incarceration
• Domestic violence
• Community violence
• Living in unsafe neighborhood
• Discrimination/marginalization
• Peer rejection/social isolation/bullying
• Foster care placement
• Loss of a loved one
• Chronic illness/physical disability
• Housing insecurity/homelessness
• Harsh punishments
• School performance
• Natural disaster
RESILIENCE

• Adapting well to adversity, trauma, tragedy or stress
• Mentally and/or emotionally coping well with crisis and returning to pre-crisis state
• The capacity to use personal assets to protect oneself from the potential negative effects of stressors
RESILIENCE

• Fostered through:
  • Supportive adult-child relationships
  • Positive peer relationships
  • Building a sense of self-efficacy and perceived control
  • Strengthening adaptive/coping skills and emotional regulation
  • Mobilizing faith, hope, and cultural traditions

Trauma-Informed Care (SAMHSA)

• Realizes that trauma has a widespread impact on individuals, families, groups, organizations, and communities and demonstrates an understanding of paths to recovery
• Ability to recognize the signs and symptoms of trauma in clients, staff, and others in the system
  • “What happened to you?” instead of “What’s wrong with you?”
• Seeks to avoid re-traumatization
• Integration of trauma knowledge into policies, programs, and practices
TRAUMA-INFORMED PRACTICES

• Including knowledge about trauma in care
• Promoting healing, recovery, and resilience
• Focusing on strengths, not perceived deficit
  • Communication
    • Empathic
    • Validating
    • Compassionate
• Respect

POLICY CHANGES?

• Childhood
  • Early intervention
  • Home visiting programs
  • High-quality childcare
  • Paid parental leave
• Poverty
  • Safe affordable housing
  • Desegregation of impoverished neighborhoods
  • Financial literacy education
• Education
  • Equitable pay for public school teachers
  • Universal trauma-informed school practices
  • High-quality childcare and after-school programs
  • Affordable vocational training
POLICY CHANGES?

- Employment
  - Increased job opportunities
  - Increased minimum wage
  - Reasonable extension of unemployment benefits
  - Skill and relationship building opportunities for ex-offenders

- Healthcare
  - Right - not privilege
  - Having doctors and dentists in schools
  - Mental health parity

WHAT IF…?

![Potential reduction of negative outcomes in adulthood](image)

IN SUMMARY...

“It is easier to build strong children than to repair broken men.”

-Frederick Douglass

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