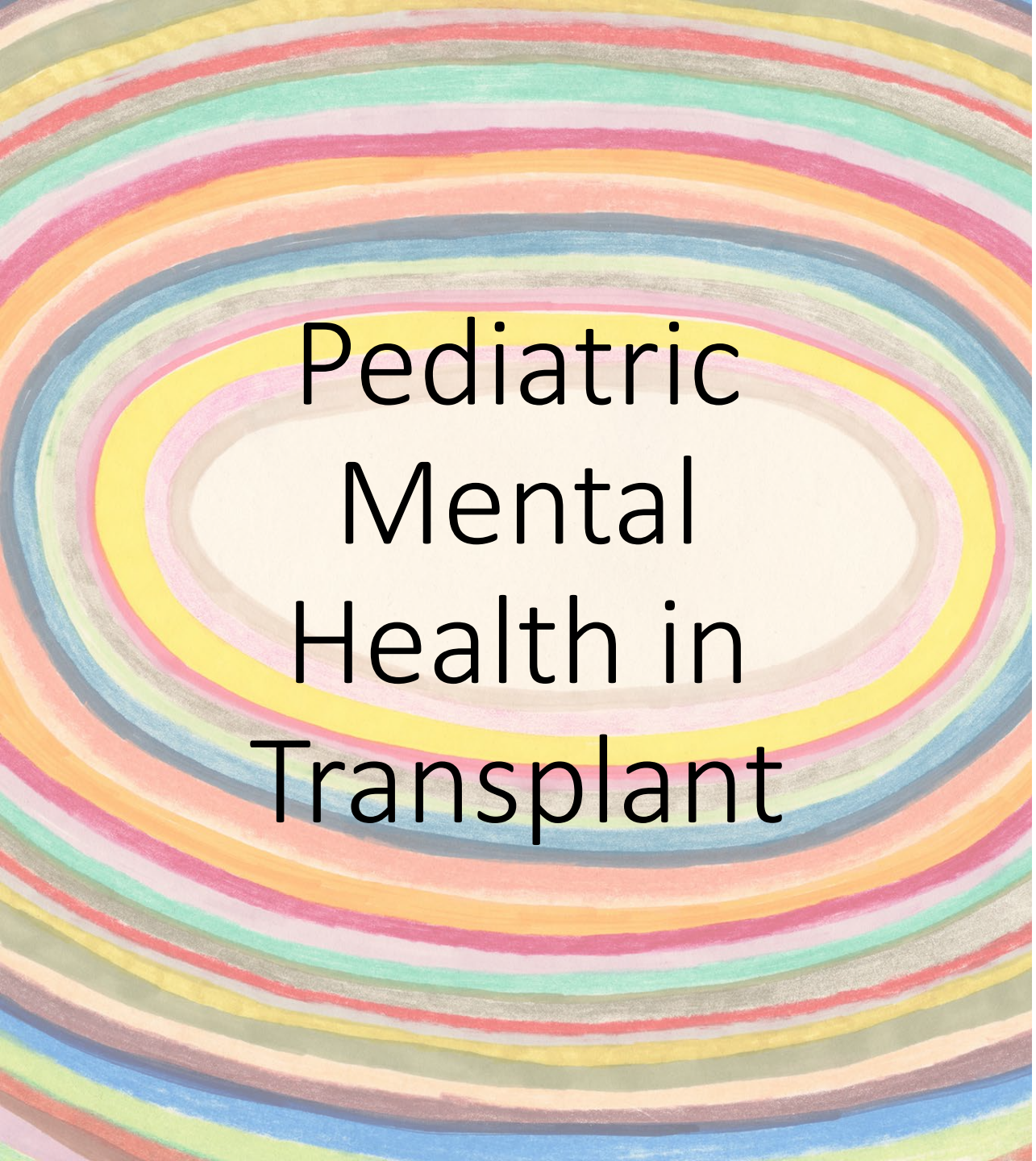

Pediatric Mental Health in Transplant

Stephen Molitor, PhD

Assistant Professor of Pediatrics

Medical College of Wisconsin

Children's Wisconsin

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No Conflicts of Interest to Disclose

Objectives

1

Compare prevalence of common mental health concerns between pediatric patients with transplant and general population

2

Describe utility of Bronfenbrenner's ecological systems theory to understand factors that may contribute to increased risk of mental health concerns for patients with transplant

3

Review three examples of mechanisms that affect pediatric mental health relevant to the individual, microsystem, and macrosystem levels of the ecological systems theory

Pediatric Patients with Transplant are at Increased Risk for Mental Health Concerns

Prevalence estimates for any psychiatric disorder for pediatric transplant patients range from 20-35%

Presence of comorbid mental health condition associated with poor health outcomes

Several quality reviews now in the literature

Di Giuseppe et al. (2020) – Stem Cell

Thyss et al (2014) – Kidney

Todaro et al (2000) – Heart

But… *Why* are they at increased risk?

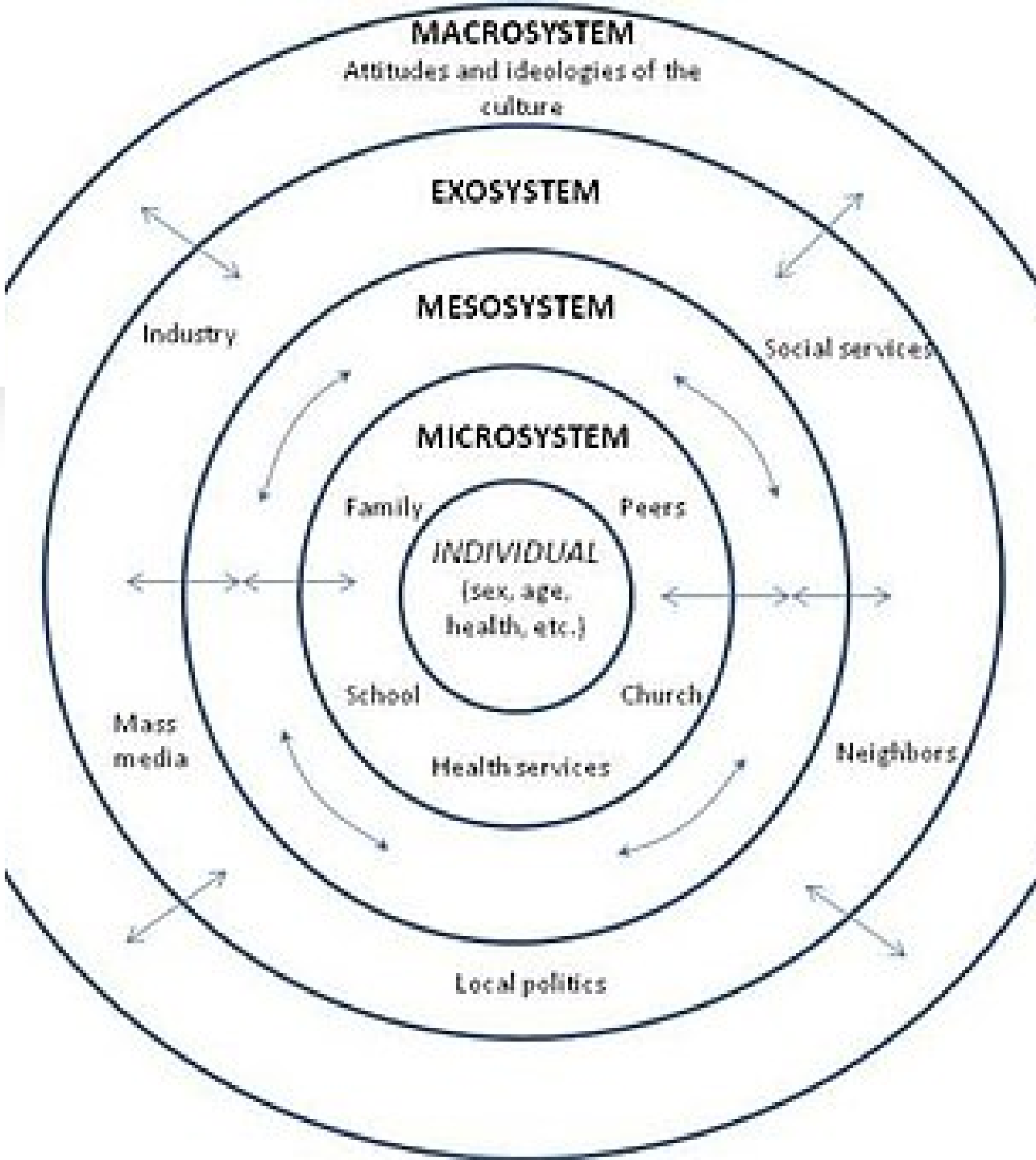
- Physiologic or disease-specific factors?
- Individual, patient-based factors?
- Environmental factors?
- Is the risk increasing or decreasing as we move into the future?

Thinking About Mental Health as a Product of A System: Ecological Systems Theory

- An oldie – but a goodie
  - Formally introduced to literature in 1977 (Bronfenbrenner, 1977)

- **Key tenet 1:** An individual exists within an environment of layered, interactive systems

- **Key tenet 2:** The system acts on the individual *and* the individual acts on the system



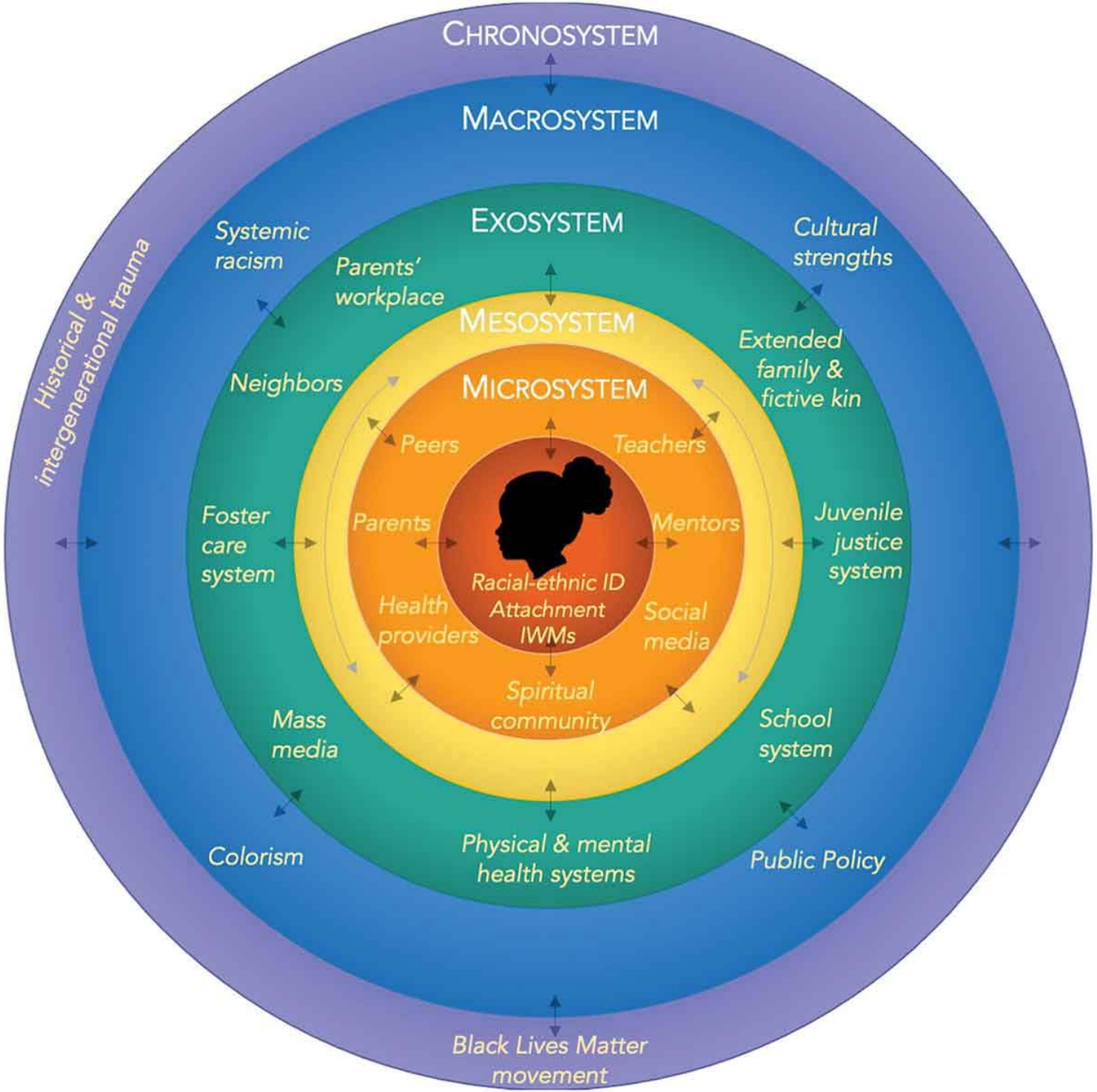


Image from Stern, J. A., Barbarin, O., & Cassidy, J. (2022).

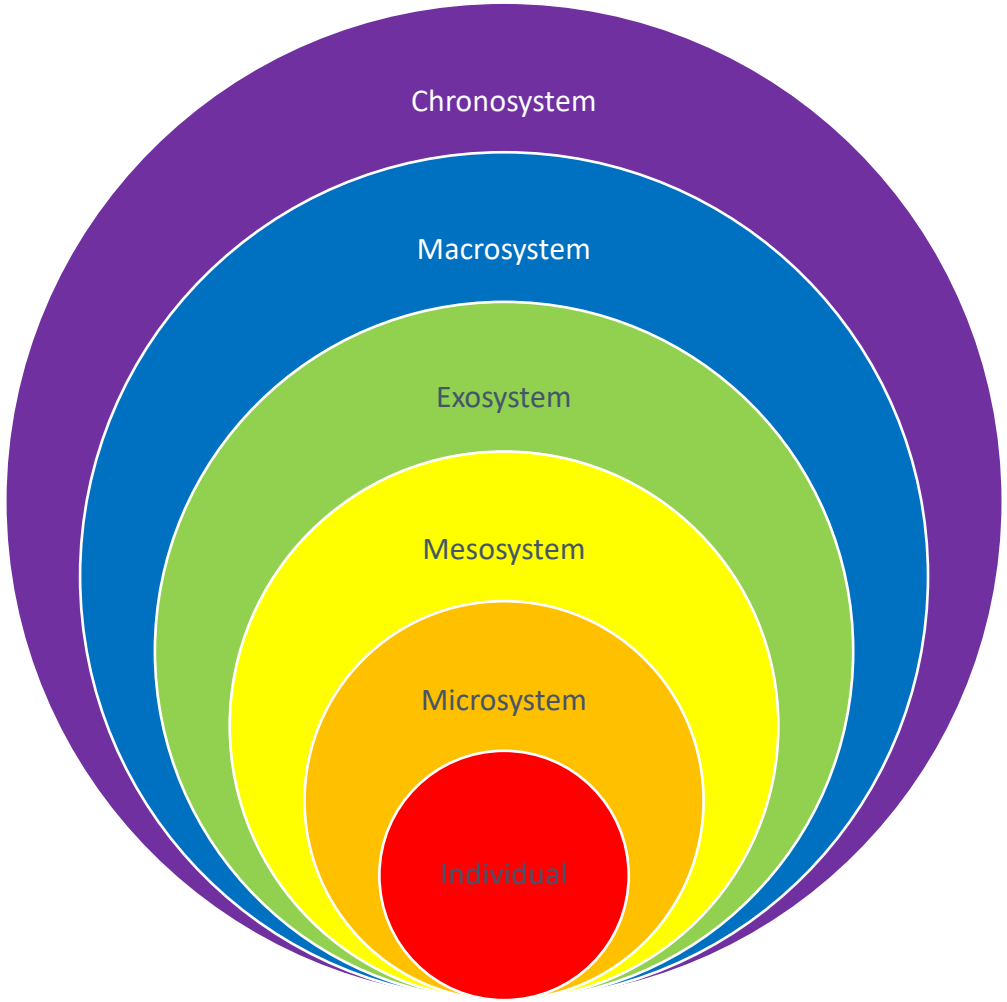
Why is Ecological Systems Theory Useful?

- Reminds us that patients aren't developing in a vacuum
- Helpful as a thought experiment for identifying all possible systems that could affect patient functioning
- Emphasizes how systems interact with the patient/each other
- Helps us consider best level to implement interventions

Today's Focus

- Medical Traumatic Stress
  - Individual
  - Microsystem
- Parent Mental Health
  - Microsystem
  - Exosystem
  - Macrosystem
- Systemic inequities in Health Care Policies
  - Macrosystem
  - Chronosystem

Example 1: Medical Traumatic Stress



What is Medical Traumatic Stress (MTS)?

- Psychological response to painful, frightening, or life-threatening medical experiences (Kazak et al., 2006)
- Can be acute or chronic experience
- Some objective criteria, but also some subjectivity based on patient

Prevalence and Impact of MTS in Patients with Transplant

- Estimates vary between 15-30%, depending on criteria used (Mintzer et al., 2005)
- Associated with lower QoL (Hind et al., 2021)
- Increases risk for non-adherence (Duncan-Park et al., 2022; Shemesh et al., 2000)

How can we address effects of MTS on Mental Health?

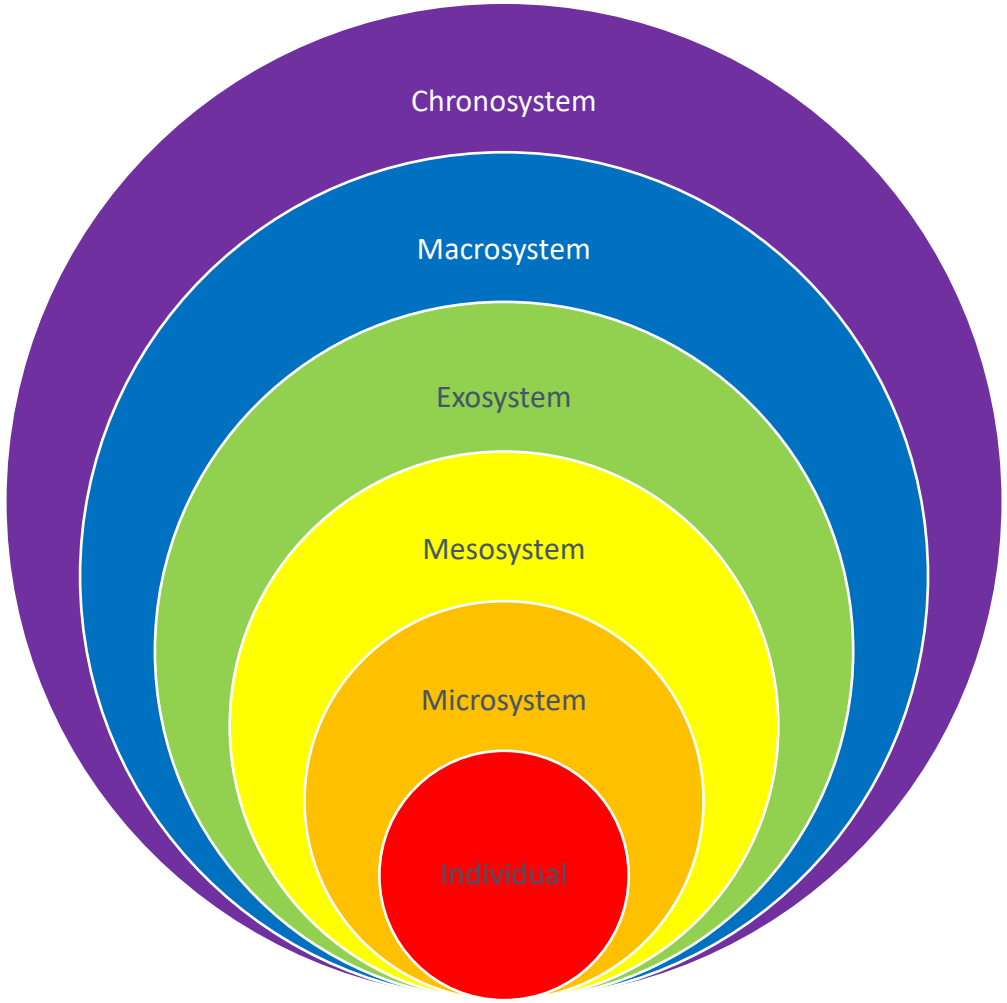
At the individual level

- Referral for therapy
  - Trauma-Focused Cognitive Behavioral Therapy
- Develop resilience-focused interventions
  - Post-traumatic growth

At the microsystem level

- Screen for MTS risk
- Education for caregivers, schools

Example 2: Caregiver Mental Health



What the data tells us about caregiver mental health

- Systematic review by Cousino et al. (2017)
- Similar rates of depression and anxiety to general population
- Increased rates of trauma/stressor-related disorders
- Rates of parenting stress and global stress ratings trend higher

Why Should We Care About the Caregivers?

- High correlation between caregiver mental health and child mental health (Van Loon et al., 2014)
  - Shared genetic loading, shared environment, shared experiences
- Caregivers have key role in pediatric transplant care
  - Basic needs: Transportation, acquisition of medications
  - Communicators with most of patients' other microsystems

Challenges to Addressing Caregiver Mental Health

- Caregiver Autonomy
- Ethical Concerns Regarding Billing/Documentation
- Limited Resources for Adult Care in Pediatric Environments

How Can We Address Caregiver Mental Health?

Microsystem Level

- Educate caregivers on the effect of their mental health on child

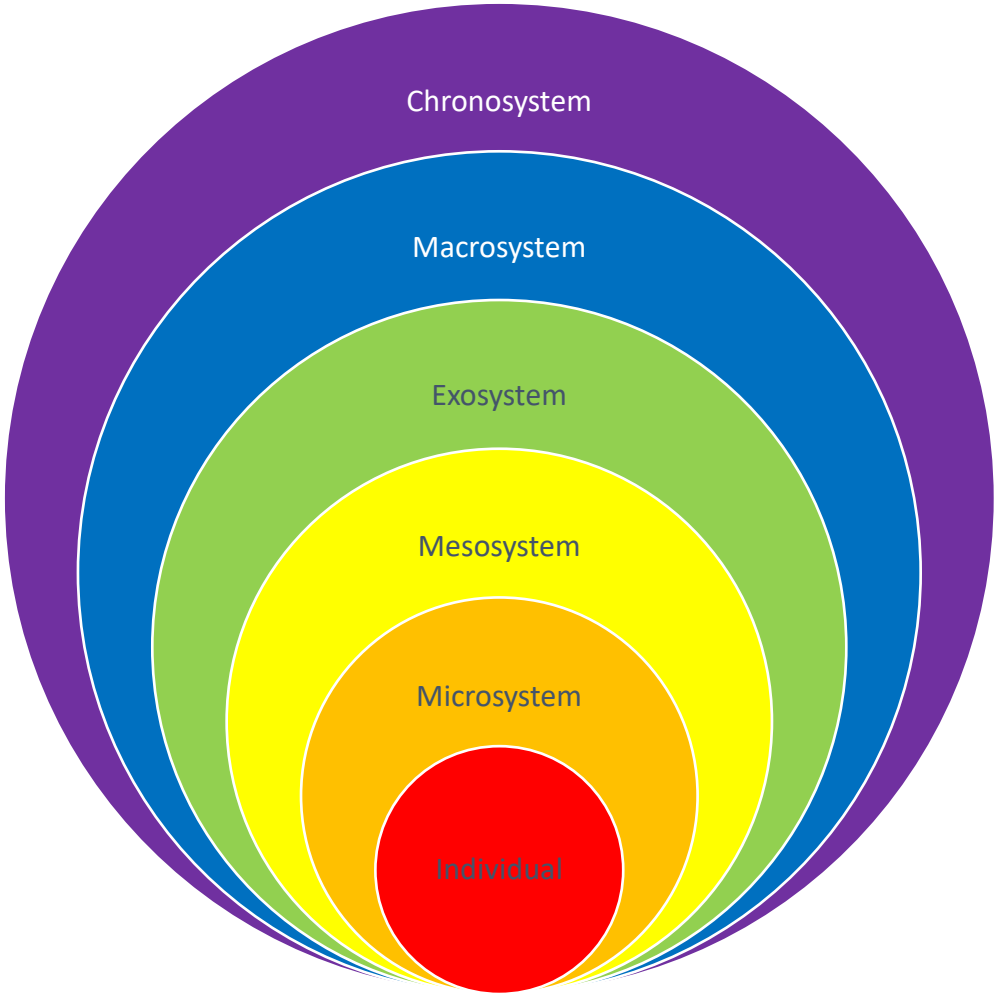
Exosystem Level

- Help caregivers problem-solve distressing health care issues
- Be aware of caregiver resources for mental health within your health system

Macrosystem Level

- Advocate for improved access to adult-oriented mental health services in pediatric settings

Example 3: Systemic Health Inequities



Transplantation is Affected by Systemic Inequity

- Cognitive functioning/developmental disability as a factor in transplant candidacy (Statter et al., 2020)
- Race-based discrepancies in referral for evaluation and listing wait times (Maclay et al., 2024)
- Access to care is dependent upon access to financial resources/insurance (Maclay et al., 2024)

How Inequities Can Affect Mental Health

Presence of persistent threat to well-being

Cumulative effects of systemic inequity

Distress related to systemic inequities can be resistant to current evidence-based interventions

How can we address effects of Inequity on Mental Health?

At the individual level

- Develop interventions through alternative lenses
  - Liberation Psychology

At the macrosystem level

- Acknowledge our role in either changing or perpetuating the systems we operate in
- Continuously call out inequities and advocate for equitable policy

Final Thoughts

- Our patients exist within a complex system – and it is challenging for a medical team to observe most of it
- Pediatric mental health concerns are a product of these systems and interactions
- Transplant teams can increase awareness of these systems and act on these systems to promote patient well-being

Questions?

For more discussion…

Email: smolitor@mcw.edu

Twitter: @DocMolitorPhD

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