

Psychiatric Consequences of Chronic Medical Disorders in Children & Adolescents

Niranjan S. Karnik, MD, PhD

Assistant Professor

Section of Child & Adolescent Psychiatry

Department of Psychiatry & Behavioral Neuroscience

The University of Chicago Pritzker School of Medicine



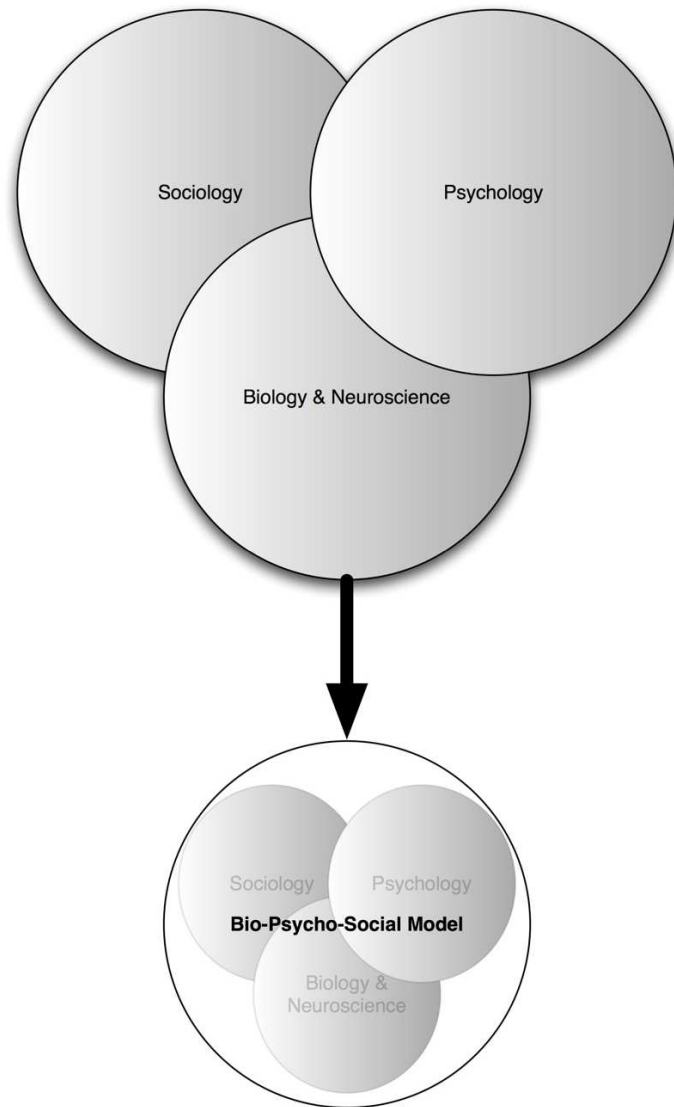
Conflicts of Interest

- I do not consult to any pharmaceutical companies
- I do not provide consultation to any entities relevant to the content of this presentation



Outline

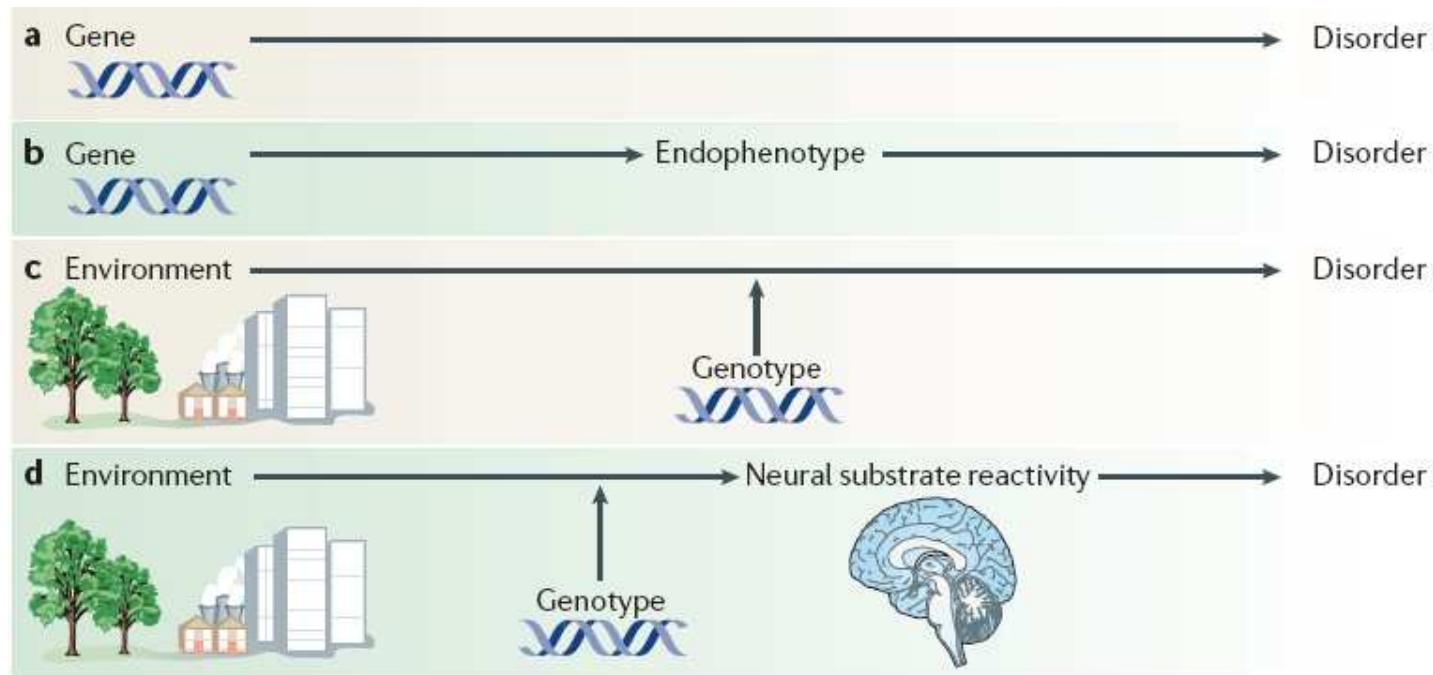
- The Biopsychosocial Model
- Gene-Environment Interactions
- Risk & Resiliency
- General Challenges Faced by Children and Adolescents with Medical Disorders
- Recent Research on Alagille Syndrome
- Interventions and Treatment
- Conclusions



Our working model

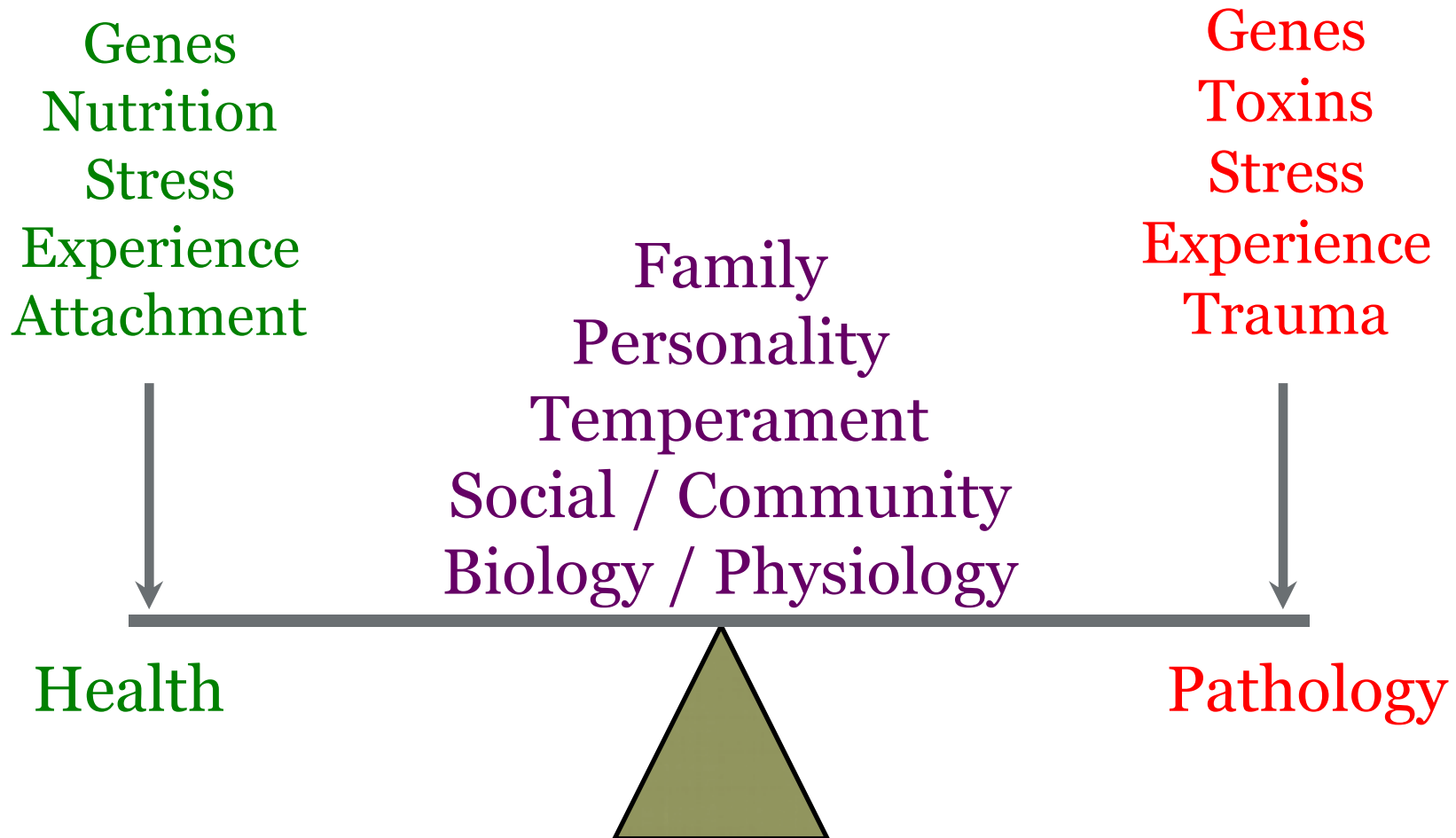
- Biology cannot be separated from other experiences
- Social context is essential to consider
- Change is part of each level of experience

Gene-Environment Interactions



Caspi A, Moffitt TE. Gene-environment interactions in psychiatry: joining forces with neuroscience. *Nat Rev Neurosci.* 2006 Jul;7(7):583-90.

Risk-Resiliency Model





General Issues Faced By Children with Chronic Medical Illness

- Altered development
- Peer relationships
- Self-Image and Self-Esteem
- School achievement and success
- Trauma and Medical PTSD
- Depression and Anxiety



Development

- Development is the normative process through which children grow and develop into functional adults
- Illness at any age can disrupt this process
- Delays in speech and motor development can occur
- Nevertheless all individuals will grow and develop their sense of physical, emotional, intellectual and social selves to the extent that they can
- Delay does not mean never



Peer relationships

- Humans are essentially social beings
- We learn social norms through interactions with peers and adults
- Illness creates a barrier between children and makes it difficult to form peer relationships
- Limited peer contact delays appropriate adolescent emotional and romantic development
- Peers can be a source of support or a cause for difficulties (bullying or victimization)



Self-Image & Self-Esteem

- Research with adults and children consistently shows that individuals with chronic medical problems often have poor self-image and lower self-esteem
- Poor body image is common, especially when repeated surgery is required, growth is slowed, or the illness has particular physical characteristics
- Lower self-esteem often results from being unable to track with peers
- More common in adolescents than young children



School achievement and success

- Chronic absenteeism (due to appointments, illness or treatment) can easily push students off their normative trajectory
- Special education can be a useful tool
- Mainstream when possible to promote peer contact
- Repeated set-backs or failures can lead to lower self-esteem, depressive symptoms, and lack of motivation
- Learned helplessness

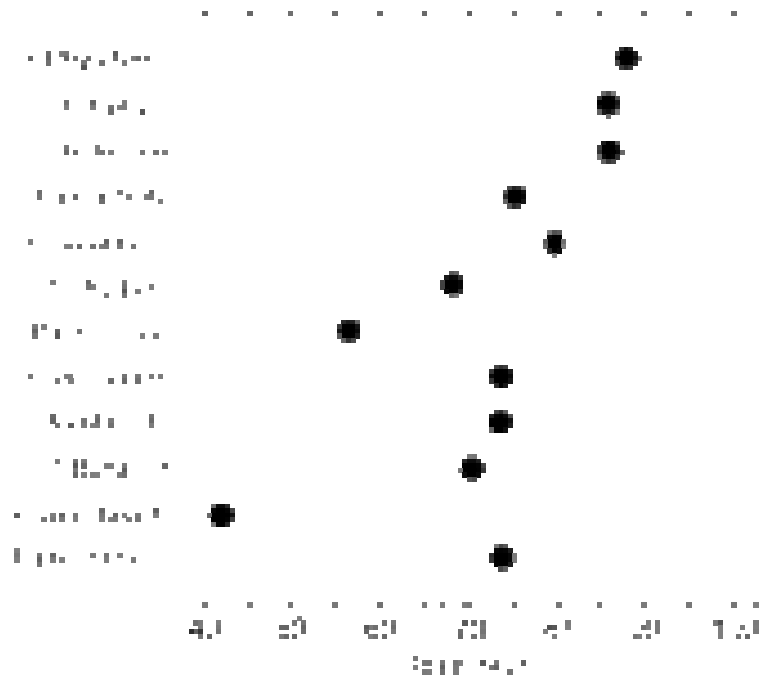
Trauma and Medical PTSD

- Medical PTSD is increasingly recognized as a major effect of treatment
- Repeated blood tests, surgical interventions, constant need to be vigilant can all cause medical PTSD
- Triggers and effects differ depending on the age of the child
- Children and adolescents present differently than adults
- Studies of parents and caregivers of sick children show that PTSD can also be experienced secondarily
- When parents suffer symptoms children are at greater risk themselves for the development of mood and affective disorders
- Siblings can likely also be affected secondarily

Trauma and Medical PTSD

- Traditional Signs & Symptoms:
 - Nightmares
 - Flashbacks
 - Hyperarousal
 - Panic Attacks
- Medical Illness Specific
 - Intense fear of medical procedures
 - “White coat anxiety”
 - Reactions to being in or near the hospital
 - Depressive state or appearance during hospitalization

Health Status of AGS Youth



- AGS youth show functional losses across multiple domains
- Most of these hinge on mental health or behavioral domains
- Note the family cohesion finding

Elisofon SA, Emerick KM, Sinacore JM, Alonso EM. Health status of patients with Alagille syndrome. *J. Pediatr. Gastroenterol. Nutr.* 2010 Dec.;51(6):759-765.

Interventions & Treatment

- Educational intervention – keeping children “on track” is important or getting a good education plan (IEP, Special Ed)
- Individual Treatments (age dependent):
 - Cognitive Behavioral Therapy
 - Interpersonal Psychotherapy
 - Supportive Psychotherapy
 - Pharmacological Treatment
- Family-Based Treatments
- Social & Environmental Treatment
 - Peer support groups
 - School-based peer groups
 - Anti-bullying programs
 - Normative activities
 - Clubs
 - Sports
 - Special activities
 - Special Olympics
 - Special Camps

Trauma and Medical PTSD

Empirical Treatments

- Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)
- Trauma Systems Therapy (TST)
- General Medications
 - SSRIs
- Symptomatic Medications
 - Sleep agents
 - Benzodiazepines
 - Beta-blockers

Future Directions

- Narrative approaches to trauma
 - Focus on helping the child or adolescent create a story
 - Takes experiences from the body and puts them to words
 - Words and language can then be worked with from a therapeutic perspective



Pediatric Psychosomatic Medicine Clinic

- Subspecialty clinic for children with medical disorders and psychiatric issues
- Specialize in consultation and assessment
- Provide recommendations to the primary treatment team
- Conduct pre-transplant psychosocial assessments
- Handle medication evaluations and treatment
- Provide brief psychotherapy when indicated

Conclusions

- Present studies of mental health problem likely underestimate the problems
- Earlier consultation is better
- Children entering adolescence with ASG may benefit from working with a therapist – if only to reflect on their experience to date
- Psychiatrists can serve as parts of the interdisciplinary team needed to treat ASG – can offer effective treatments for pain, sleep, anxiety, stress and mood concerns
- Having established providers increases the likelihood of success with interventions
- Outpatient consultation is always an option – many children's hospitals have parallel inpatient consultation available



Thank You

Niranjan Karnik

Email: nskarnik@uchicago.edu