

H 3924

Housing = Health panel Transgenerational Impact part B
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Dear Legislators,

Thank you for sharing your time with us today.

My name is Norma Hylton and I'm a student at Harvard Medical School pursuing an MD and a PhD in Neuroscience.

I want to begin by acknowledging my privilege as a person who has not been affected by housing insecurity. I am here as an ally to show my respect and support for the communities of Boston. To expand on Hanna's remarks, I will discuss how both biological and social factors combine to impact behavioral and cognitive development in children. Social stressors can directly interact with processes of energy metabolism, neuronal maturation in the brain, and immune system activation.

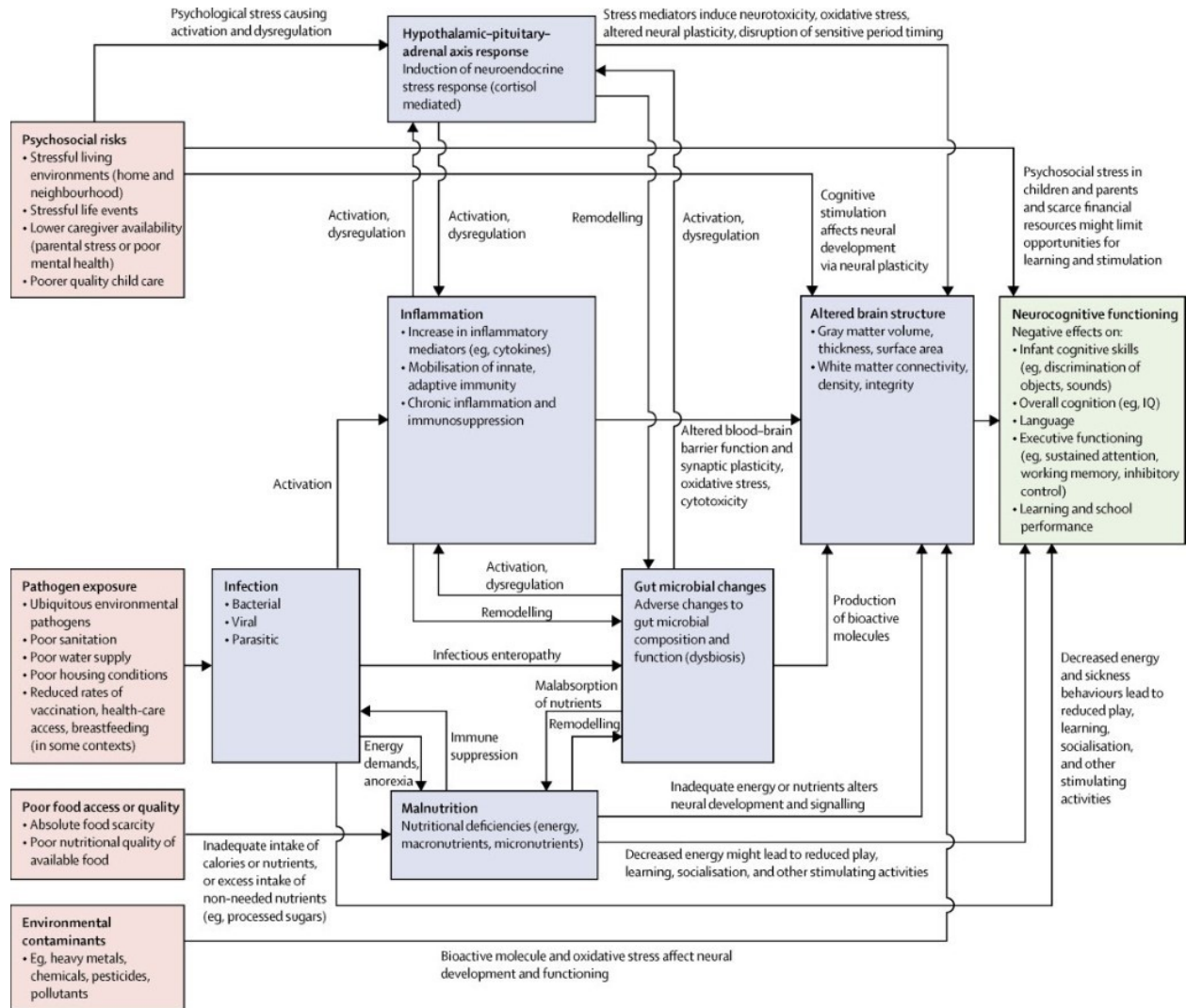
Housing insecurity acts a psychosocial risk factor that impacts health directly via insults to childhood brain development, and indirectly through the production of chronic stress and immune activation, increasing risk for infections and chronic diseases. In a study by Evans and colleagues published in the Journal of Child Development, children living in poverty were found to have marked increases in resting blood pressure and stress hormone levels--cortisol, epinephrine, and norepinephrine. These increases were noted in infants and at 9 years of age, indicating that these changes are perceptible at a young age and can be sustained throughout development. Researchers in the Harvard Center for the Developing Child have also found that chronic stress, exhibited through high levels of these hormones, has detrimental effects on developing brain architecture, meaning neuronal maturation processes that happen postnatally.

What this figure demonstrates are the many interconnected social risk factors that combine with biological factors to impact health in development. Individuals experiencing housing insecurity often face a variety of challenges related to low-income home environments in the setting of disrupted communities. The stress of financial and personal instability has a profound impact on infants and children that sets younger generations on a trajectory of poorer health outcomes.

Furthermore, housing insecurity has fiscal impacts. This bill is a public health policy and providers in Boston Hospitals are recognizing the need for programs to stabilize communities, listen to community needs, & increase funding efforts to support their patients. Thus, rent control serves as a systemic solution and an effective tool that communities can use in service of their health.

As an ally, I recognize that I am not a member of the community affected. I am not here to tell the communities in Boston what is best for them. Just as the community I grew up in had the decision-making power to impact their housing, I'm here to show my support and respect for the individuals in these communities, and to encourage all to support their autonomy and to listen to the experiences of those most affected by housing insecurity. Those most affected must lead, because the consequences are community-wide and intergenerational.

Proposed biological pathways that mediate effects of selected poverty-associated risks to neurocognitive outcomes in children (Jensen et al., 2017)



References:

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Jensen, SKG, Berens, AE, Nelson, CA. Effects of poverty on interacting biological systems underlying child development. *Child & Adolescent Health*, 1(3): 225-39.