Health Equity Hearing Written Testimony
Panel #16 Housing = Health and Housing Stability

Organization: Housing = Health

Topic: Intergenerational Impacts of Housing Insecurity

Author: hanna amanuel@hms.harvard.edu

Dear Legislators,

Thank you for this opportunity.

I'm Hanna Amanuel, a Brookline resident, student at Harvard pursuing an MD-PhD in Social Anthropology, and member of our Student National Medical Association. The impact of displacement spreads beyond kinship, friendship, and all the ties that bind our communities together. Beyond the community, the damaging effects of housing insecurity extend across generations.

Displacement not only leads to limited access to prenatal care, which is a clear contributor to negative outcomes like preterm birth and low birth weight, but also adversely affects the health of subsequent generations through maternal stress. A recent study by the Journal of the American Academy of Child & Adolescent Psychiatry showed that infants' abilities to respond to stress are negatively impacted by the mother's experience of stress across her lifetime, including her own adverse childhood experiences (Gray et al. 2017).

One mechanism through which maternal stress impacts the health of the next generation is through epigenetic effects. Epigenetics are changes to the genome due to factors that are not found in the DNA sequence itself, but rather through environmental factors such as maternal stress.

A study by researchers at Columbia University showed that maternal stress can both directly and indirectly lead to epigenetic changes, negatively impacting infant health (Monk et al. 2012). These maternal stress-induced epigenetic effects were found to lead to higher cortisol levels in three-month-old infants, leading to a range of biobehavioral deficits in infants and children, which Norma will further explore.

In conclusion, housing insecurity not only endangers whole communities, it also puts children who have yet to be born at risk for devastating health outcomes. Enacting the COVID-19 Housing Stability Bill will allow us to provide future generations with the critical opportunity to thrive.

Sincerely, Hanna Amanuel

References

Gray, Sarah AO, et al. "Thinking across generations: unique contributions of maternal early life and prenatal stress to infant physiology." *Journal of the American Academy of Child & Adolescent Psychiatry* 56.11 (2017): 922-929.

Monk, Catherine, Julie Spicer, and Frances A. Champagne. "Linking prenatal maternal adversity to developmental outcomes in infants: the role of epigenetic pathways." *Development and psychopathology* 24.4 (2012): 1361-1376.

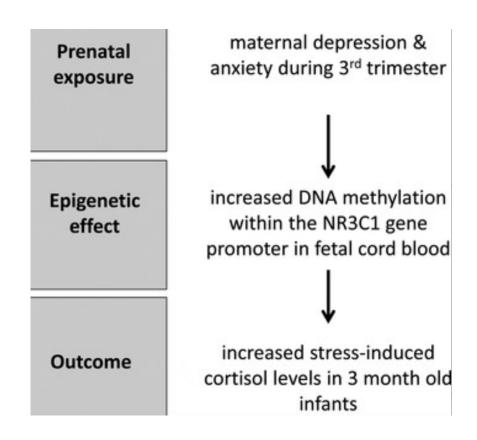


Image from Monk et al. 2012