

POOR YOUTH, POOR HEALTH: UNRAVELLING THE CAUSES

It is well established that low socioeconomic status (SES) is associated with poorer physical health in young people. Yet while many of the factors involved are well known, few studies have explored how these facets operate through one another or interact to affect health disparities.

To this end, in 2013, Hannah Schreier, completing a doctorate at the University of British Columbia at the time, and Edith Chen, a professor and researcher now at Northwestern University, reviewed the literature to come up with a more comprehensive model of how SES environments influence youth health. To narrow the scope, they focused specifically on two of the most common health concerns in childhood and adolescence: pediatric asthma and obesity.

There are many pathways through which SES affects child health: the neighbourhood environment, the family environment, and individual characteristics. At each of these levels, there are both physical and social aspects. "There are some associations between these aspects that you might expect, but others that people would not have anticipated," says Schreier of their findings.

In some cases, effects at one level spill over and influence other levels. For example, in lower quality neighbourhoods, where there are fewer parks and public facilities, parents might be less likely to encourage physical activity. Living in a violent neighbourhood has also been linked to worse overall parent mental health and more restrictive parenting, which in turn have been linked to youth asthma and obesity.

In other cases, different levels interact to create unique, synergistic effects. For instance, children exposed to significant social stress are more vulnerable to the negative influence of environmental pollutants and allergens. While the negative effects of these two factors

have been known for some time, "it wasn't obvious that exposure to both at the same time was much, much worse, and that it wasn't just an additive effect," notes Schreier.

The physical and social domains also influence each other: a crowded home can influence family dynamics, creating more conflict and stress, which in turn can affect the ability of families to maintain their home environment. These reciprocal relationships create spiraling sources of exposure, increasing the risk of childhood health problems.

Ross Thompson, a professor of developmental psychology at the University of California, has worked extensively making policy recommendations to try to improve young children's lives. He says that with this paper, Schreier and Chen are encouraging both researchers and policy makers to adopt a more multilevel orientation to their thinking when considering the genesis of health problems.

"A multilevel approach is necessary both for understanding the problem and for think-

ing about what effective interventions are going to look like," says Thompson. From this perspective, interventions focusing on just one factor "may be doomed to failure." Another implication of a multilevel approach is thinking in terms of the potential downstream effects. "In some cases, you can get more significant effects by acting on the family or the neighbourhood than on the child directly."

He also pointed to the importance of timing, both in terms of duration of exposure and critical periods of development. For example, the authors note that SES is particularly influential during early childhood. This suggests that some interventions may be more effective if carried out early in children's lives.

"We need more studies that pull together these different levels of influence," concludes Schreier. "Going even further, we need to get a better sense of the physiological mechanisms that then lead to poorer health outcomes." 🦋

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