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Commentary

Distressed Communities as a Breeding Ground for Noncommunicable Conditions

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A B S T R A C T

Recent research has driven home the close relationship between place and health. Geography is often a greater driver of adolescent morbidity and mortality than behavior. To elucidate these relationships, the Well-Being of Adolescents in Vulnerable Environments study has collected and analyzed data on the health and well-being of adolescents' lowest income communities of five cities: Baltimore, United States; Ibadan, Nigeria; Johannesburg, South Africa; New Delhi, India; and Shanghai, China.

Over the past decade, we have become increasingly attuned to the role that social contexts play in determining the health and well-Being of people both in the United States and globally [1]. So too, we have become increasingly aware that geography is often a greater driver of adolescent morbidity and mortality than behavior. For example, Jennings and colleagues have shown that human immunodeficiency virus (HIV) and sexually transmitted infection (STI) rates of a community rise commensurate with incarceration rates [2]. What is important about this research is that it is not a greater sexual promiscuity in crime-infested areas that drives the STI rate but rather a more restricted availability of males in those communities because of incarceration. We tend to look at STI acquisition as a function of individual behavior, but this research says that it is not. Place and health are inexorably intertwined.

Factors that significantly magnify the relationship between place and health include both the changing nature of adolescent morbidity and mortality, as well as the adult causes of illness and death that have their precursors in the teen years. No longer are infectious diseases the major killers of young people. Today, six of the top 10 causes of death among young people 10–24 years of age are noninfectious road traffic accidents, self-inflicted injury, interpersonal violence, drowning, fire, and war, with the seventh, HIV, heavily influenced by behavior and social context. Additionally, fully half of all adult disease has its precursors in childhood and adolescence: smoking and other substance use, obesity, lack of exercise, stress, and social adversity. These are the triggers for adult noncommunicable conditions (NCDs).

The Well-Being of Adolescents in Vulnerable Environments (WAVE) study affords the opportunity to empirically explore the relationships among place, health, and the precursors of adult NCDs among adolescents living in the lowest income communities of five cities: Baltimore, United States; Ibadan, Nigeria; Johannesburg, South Africa; New Delhi, India; and Shanghai, China. As has been reported by Decker et al. in the present volume, the study focused on 15- to 19-year olds living in very low-income neighborhoods. Some of these young people were in school, whereas others were out; some were living in households, whereas others were unstably housed or were homeless.

Poor neighborhoods create powerful constraints on the lives of young people by limiting social, human, and financial capital. In Baltimore and Johannesburg, for example, young people spoke of the lack of human supports and the frequent unavailability of parents. In both these communities, a significant number of

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young people told us there was no place where they felt safe, whether in home or outside [3]. In Delhi and Ibadan, it was girls who disproportionately felt threatened and vulnerable outside the home [4]. In Shanghai, migrant status contributed to the lack of personal security and well-being [5].

Another theme that we heard was the lack of commitment of those who lived in these neighborhoods to any community improvement. As one young person in Baltimore said, "In order to have a healthy community you have to have neighbors who are willing to do something about it." The lack of engagement and supports for youth was a recurrent theme. So too, were drugs and violence.

Drugs, alcohol, and violence also characterize many of the lowest income communities where young people who participated in the WAVE study live. This was true in Delhi where respondents talked about children as young as 8 or 9 years smoking cigarettes and using Gutka[1]. In Johannesburg, it is alcohol and marijuana [6].

In fact, when we looked across sites, boys reported tobacco, drug, and alcohol use to be their primary health concern. The fact that the latter two substances are associated with violence is another major issue [6]. For girls, sexual vulnerability was their primary health concern. In Baltimore, for example, where intimate partner violence is endemic, compared with peers who were not exposed to such violence, intimate partner violence-exposed girls were more than twice as likely to have had multiple sexual partners in the past year (41% vs. 19%) and nearly twice as likely to report depression (50% vs. 29%). Each of these factors is significantly associated with both adolescent and adult NCDs. We see similar patterns of risk in Johannesburg [7].

Young people who grow up in economically impoverished communities live with persistent fear, an increased sense of vulnerability, less social capital, and more environmental distress. These, in turn, predispose young people to more chronic mental health disorders; more cigarette smoking; earlier sexual behavior with less protection against HIV, STIs, and pregnancy; hypertension; less social capital; less social cohesion; and less parental engagement than peers in higher income neighborhoods [3].

Although we in the international community talk about high- and low/middle-income countries, the WAVE study suggests that, for young people growing up in poverty, residency in a high-income country may matter far less than the immediate social contexts within which they develop and grow. The present study suggests a number of commonalities across impoverished neighborhoods whether they are in high- or low-income countries. We see that across sites, behaviors that predispose to NCDs are increased among youth living in low-income distressed communities. We see that the issues and risks faced by young men and women in these communities differ significantly by gender, and we are reminded that efforts that address solely the behavioral precursors of NCDs and not the social contexts that are their breeding grounds are unlikely to have great impact.

As Mmari et al. [8] note in their article in this supplement, neighborhoods are powerful socializing influences, but what we are actually seeing is more than socialization. What WAVE shows us is that toxic environments breed behaviors and threats that compromise adolescent health and well-being in the short-term and predispose residents to adult NCDs and mortality across time. In Baltimore, just 10 miles separates the Hollins Market and Roland Park neighborhoods, but there is an 18-year differential in the average life expectancy between these two communities. The WAVE study provides insights as to why.

References

[1] WHO Commission on the Social Determinants of Health. Closing the gap in a generation: Health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health. Geneva: World Health Organization; 2008.
[2] Jennings J, Taylor R, Salhi R, et al. Neighborhood drug markets: a risk environment for bacterial sexually transmitted infections for urban youth. Soc Sci Med 2012;74:1240–50.
[3] Marshall BD, Astone N, Blum R, et al. Social capital and vulnerable urban youth in five global cities. J Adolesc Health 2014;55:S21–30.
[4] Brahmbhatt H, Kagesten A, Emerson M, et al. Prevalence and determinants of adolescent pregnancy in urban, disadvantaged settings across five cities. J Adolesc Health 2014;55:S48–57.
[5] Cheng Y, Li XC, Lou C, et al. The association between social support and mental health among vulnerable adolescents in five cities: Findings from the study of the well-being of adolescents in vulnerable environments. J Adolesc Health 2014;55:S31–8.
[6] Olumide A, Robinson A, Levy P, et al. Predictors of substance use among vulnerable adolescents in five cities: Findings from the Well-Being of Adolescents in Vulnerable Environments study. J Adolesc Health 2014;55:S39–47.
[7] Decker M, Peitzmeier S, Olumide A, et al. Prevalence and health impact of intimate partner violence and non-partner sexual violence among female adolescents aged 15-19 years in vulnerable urban environments. J Adolesc Health 2014;55:S58–67.
[8] Mmari K, Lantos H, Blum R, et al. A global study on the influence of neighborhood contextual factors on adolescent health. J Adolesc Health 2014;55:S13–20.

[1] Gutka is a mild stimulant better known as betel nut. It has significant adverse health consequences. It is banned in much of India.