The renovation of small parks in high-poverty Black and Latino New York City (NYC) neighborhoods was associated with a modest increase in park usage compared with parks that were eligible for renovation but not yet renovated, according to a new study by Kodali et al in this issue of *JAMA Network Open*. The authors studied the NYC Department of Parks and Recreation's Community Parks Initiative (CPI), a $318 million, equity-based investment to upgrade 67 neighborhood parks with design features such as more seating and shaded areas, planting more trees and vegetation, renovating ball courts and playground equipment, and installing lighting. CPI selected parks based on criteria of being in densely populated neighborhoods with high poverty and lack of robust investment in the prior 2 decades. Over 3 waves (before, shortly after, and long after the intervention), study staff spent at least 4 days in each park during the summer months and captured use level, type, and user characteristics with a validated direct observation tool.

The study by Kodali et al found a sustained increase in park usage in the intervention group, and in contrast, a decline in park usage in the control group. Park usage is an important outcome because of the known health benefits to individuals who spend time in parks. Physical activity often comes to mind first, and the authors directly measured physical activity, classifying park user behavior into either sitting and/or standing vs walking and/or vigorous. In intervention parks, there was a marked increase in park usage for sitting and standing behaviors (with no change in the control group), and minimal relative change for walking and vigorous physical activity (with marked decrease in the control group).

Because this study's approach captured use and physical activity at each park cross-sectionally and did not follow individuals longitudinally, it is possible that certain aspects of the park renovations drew more sedentary users, without necessarily suggesting a decrease in physical activity among other individual users. For example, additional seating and shaded areas lend themselves to attracting people who want to sit and relax, as opposed to run or play sports.

While fostering physical activity is one way that parks contribute to health, the individual and community health implications for park renovation and increased usage go beyond this study's outcomes. Spending time in green spaces has been shown to reduce blood pressure, reduce blood flow to the part of the brain that controls rumination, help improve people's moods, and lead to reduced symptoms of anxiety and depression. Furthermore, parks provide opportunities for residents to gather with family and friends, as well as meet others in their neighborhood, which leads to a greater sense of social cohesion and belonging in one's community. For example, Central Park, a vibrant park in Manhattan, New York, is a known nexus of social activities such as movie screenings and concerts, attracting tourists and residents alike.

Investment into public space, and in particular turning dilapidated or blighted spaces into clean and aesthetically pleasing spaces, has broad implications for community health and the experience that residents have in their neighborhoods. Indeed, social cohesion speaks to how a community-level attribute influences individual health. For example, a randomized clinical trial found that turning blighted vacant spaces into clean and green spaces increases nearby residents' use of the outdoors for relaxing and socializing with neighbors. In addition, this same study found that renovations led to a reduction in crime, increases in perceptions of safety, and improvement in self-reported feelings of depression for those living near newly greened spaces. It is important to note here that benefits of investment into public space extend beyond the people who use the space to those who live nearby but whom may never set foot in the space. Merely passing by green spaces may confer stress-reducing benefits, as evidenced by a randomized clinical trial that showed passing green spaces...
during a neighborhood walk significantly reduced participants’ heart rates compared with passing by nongreened spaces.5

Investments in public spaces can reduce crime and improve residents’ perceptions of safety; and also contribute to their decision to use a park or not. For example, in an intervention aimed at increasing postpartum women’s engagement with nature in neighborhoods similar to those in the study by Kodali et al,1 participants raised concerns about neighborhood conditions and safety, including infrastructure (uneven or broken sidewalks), lack of cleaning (broken glass on the ground) and traffic safety (speeding drivers) as factors that determined whether they would go to parks in their neighborhood.6 Safety concerns could explain why the CPI intervention was associated with a more pronounced net increase in park use among women while they simultaneously had a greater decline in park use in the control group, especially because the study overlapped with a period of relative increase in crime in New York City that occurred during the COVID-19 pandemic.

One notable feature of the CPI is the early involvement of community members in contributing to park design, although we do not know the depth of involvement. Efforts to include diverse potential users are important to harness community support for such projects, sustain engagement, and guard against neighborhood investments that could be part of or lead to displacement of long-term residents. Indeed, concerns of gentrification often arise around renovation projects, as city governments sometimes leverage green infrastructure as a marketing tool to attract developers and newcomers, at times at the expense of existing residents. A study of new or renovated natural outdoor environments in gentrifying neighborhoods found that residents often experienced them as nontherapeutic landscapes with which they were not physically or emotionally engaged (coined “disruptive green landscapes” by the authors).7 Another New York City–based study found that in gentrifying neighborhoods, only individuals with high education or incomes benefited from neighborhood active green space lowering the likelihood of reporting fair or poor health,8 suggesting a need for public planning to account for existing socioeconomic inequality to ensure greening initiatives benefit residents equitably.

Financial investment into neighborhood conditions in communities affected by long-standing disinvestment is critical to improve health at the population level. Blighted and run-down spaces cause residents to feel neglected and lose trust in government. Notably, this study did not increase spatial access to parks but rather increased social access (eg, quality), which speaks to the importance of investment. Continued investment, for example through maintenance of the newly renovated parks, will also be important. It is also notable that the parks in this study were relatively small, averaging 1 acre, which speaks to the role that small public spaces can play in the day-to-day of community residents.

The findings by Kodali et al1 highlight the effectiveness of community-informed efforts by local governments that seek to improve neighborhood conditions through substantial capital investment. Understanding residents’ experiences of the planning process, as well as ongoing experience of the parks themselves will give further context to the effect of CPI and other similar efforts across the country, on individual and community health. Future work should also assess CPI’s effect on crime and residents’ perceptions of social cohesion and safety. Describing the implementation of, and continuously evaluating the effect of CPI ultimately provides greater evidence for the expansion of municipal park renovation efforts, and it can also serve as guidance to other municipalities seeking to improve neighborhood conditions as part of community health improvement efforts.
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