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More Than Just An Eyesore: Local Insights And Solutions on Vacant Land And Urban Health

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ABSTRACT *Vacant land is a significant economic problem for many cities, but also may affect the health and safety of residents. In order for community-based solutions to vacant land to be accepted by target populations, community members should be engaged in identifying local health impacts and generating solutions. We conducted 50 in-depth semi-structured interviews with people living in Philadelphia, Pennsylvania, a city with high vacancy, about the impact of vacant land on community and individual health and safety, as well as ideas for solutions to vacant land. Participants described a neighborhood physical environment dominated by decaying abandoned homes and overgrown vacant lots which affected community well-being, physical health, and mental health. Vacant land was thought to affect community well-being by overshadowing positive aspects of the community, contributing to fractures between neighbors, attracting crime, and making residents fearful. Vacant land was described as impacting physical health through injury, the buildup of trash, and attraction of rodents, as well as mental health through anxiety and stigma. Participants had several ideas for solutions to vacant land in their community, including transformation of vacant lots into small park spaces for the elderly and playgrounds for youth, and the use of abandoned homes for subsidized housing and homeless shelters. A few participants took pride in maintaining vacant lots on their block, and others expressed interest in performing maintenance but lacked the resources to do so. Public health researchers and practitioners, and urban planners should engage local residents in the design and implementation of vacant land strategies. Furthermore, municipalities should ensure that the health and safety impact of vacant land helps drive policy decisions around vacant land.*

KEYWORDS *Vacant land, Neighborhood conditions, Public health, Safety, Local perspective, Qualitative research, Urban blight, Urban renewal*

INTRODUCTION

Neighborhood conditions such as the design of roads and pedestrian walkways, the availability of nutritious food, and the number of alcohol outlets, are increasingly recognized as influencing health outcomes.[1–5] Poor neighborhood conditions are

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thought to lead to negative health outcomes, as well as to contribute to persistent racial and income-based health disparities.[6]

Vacant land is a ubiquitous neighborhood condition in many US cities that were once thriving manufacturing hubs. The last 50 years have brought plant closures, job loss, and significant population reductions.[7] As a result, urban neighborhoods in these cities have declined, leaving once active residential and commercial properties abandoned.[8–10] Philadelphia, for example, has over 40,000 vacant land parcels that are often concentrated in low-income neighborhoods.[11] This vacant land represents lost economic opportunity and erosion of the city's tax base.

Understanding the impact of vacant land on health is important to policy makers and urban planners who seek to deal with high vacancy rates in their cities; however, only a handful of studies have looked at this relationship. A study of 107 US cities showed boarded-up housing to be associated with poor health, including outcomes as divergent as gonorrhea rates, pre-mature mortality, diabetes, and suicide, even after controlling for confounding by sociodemographic factors.[12] The presence of vacant homes has also been associated with higher levels of crime and illegal activity such as prostitution, drug sales, and drug use by adolescents.[12–15] Vacant land has also been linked to elevated risk of fire injury.[16,17]

The relevance of vacant land to health can be further understood through the lens of physical disorder. Physical disorder is described as visible cues in the environment that indicate lack of control over neighborhood conditions. Physical disorder has been associated with crime, fear, and further disorder.[18–23] The "broken windows" theory offers a framework for understanding these links and holds that visible signs of neglect signal that an area is uncared for and residents are unwilling or unable to maintain control of neighborhood conditions and activity.[24] In this model, an area marked by disorder is vulnerable to criminal activity, and fearful residents may withdraw from neighborhood life. Social isolation and fear are thought to impede the development of collective efficacy, or the "linkage of mutual trust and shared expectations for intervening on behalf of the common good," perpetuating a cycle of physical and social decline.[18,25]

Physical disorder has been linked to a range of poor health outcomes including cardiovascular disease (e.g., hypertension and myocardial infarction) and mental illness (e.g., depression, post traumatic stress disorder, and substance abuse).[26–39] Physical disorder is theorized to lead to negative health outcomes by promoting chronic stress and attendant maladaptive physiologic responses, encouraging risky behavior, and eroding resident social interaction.[12,30,40–43] Fear may be accompanied by unhealthy behavior change such as reducing physical activity, increasing drug use, and minimizing neighbor interactions, all of which may contribute to poor health.[30,44] Social ties, collective efficacy, and social capital, which are all associated with positive health outcomes, may be jeopardized in neighborhoods marked by a high degree of disorder.[25,45,46]

As researchers and policy makers learn more about the connections between neighborhood conditions like vacant land and health, new interventions to address the impact of poor conditions will be developed and tested. In order for community-based solutions to be sustainable and accepted by target populations, community members must be engaged in both indentifying local health problems and generating solutions.[47,48] Community residents' perceptions of neighborhood conditions may be as important as the conditions themselves in determining both health outcomes and the solvency of interventions.[49–52]

Earlier qualitative work has demonstrated that residents identify neighborhood conditions such as physical disorder as having a negative impact on their health.[53,54] We conducted in-depth interviews with residents in Philadelphia, a city with a significant amount of vacant land, in order to understand their "street level etiologies" or understandings of how vacant land influences their health.[55] We posit that these lay perspectives are an essential foundation to the planning and implementation of neighborhood-based interventions to improve health.[52] Without information about neighborhood residents' priorities and concerns, municipalities risk investment in interventions that may have low resident uptake.[56] While lay epidemiologic perspectives may not always correspond to scientific understanding of "causes" or "risks," it is important to document where lay and scientific perspectives converge and diverge.[57] This information may help researchers and program planners to anticipate the challenges and increase the likelihood of success of neighborhood-based interventions to improve health. This manuscript builds a foundation for community-based interventions by presenting residents' perceptions of the impact of vacant land on health as well as resident-generated solutions to this common urban problem.

METHODS

This manuscript reports on findings from 50 in-depth interviews with 29 participants conducted as part of a community-based intervention study to improve environmental conditions, health, and safety through vacant lot greening. Two neighborhoods in one section of Philadelphia, Pennsylvania were randomly selected to participate (there are a total of five geographic sections in the city). We used administrative data from the city of Philadelphia to randomly select two vacant land parcels, one in each of the neighborhoods. One resident per household in the 2 to 3 blocks surrounding the randomly selected land parcel were eligible to participate if they were between the ages of 18 and 65. Participants were excluded if they were unable to walk without assistance, as another part of this study involved a walking interview around the neighborhood. Additional methodological detail is available elsewhere.[58] This study was approved by the University of Pennsylvania Institutional Review Board.

DATA COLLECTION

Participants were recruited through door-to-door outreach by two trained community-based interviewers. After obtaining informed consent, we collected demographic information and conducted 29 individual interviews in 2 neighborhoods. Approximately 3 months later, following the intervention, we conducted follow-up interviews with 21 participants. Results from both sets of interviews are pooled in this analysis. The qualitative interviews were not meant to evaluate pre- and post-intervention change, but to provide answers to complementary questions on neighborhood conditions and their perceived health influence. Interviews took place between April and August 2011 and were audio recorded. Participants received $20 and $30 for completion of the initial and follow-up interviews.

We used a semi-structured interview guide to conduct all interviews. We began by asking broad, open-ended questions, in order to allow residents to spontaneously raise the issues that were most concerning to them. Such questions included "What's it like to live here?" and "Pretend I had never been here before - tell me what your

neighborhood looks like." We later asked more specific questions to identify residents' specific concerns regarding vacancy, health, and safety.

DATA ANALYSIS

We used a modified grounded-theory approach to analyze the interviews.[59] De-identified transcripts were entered into QSR NVivo 9.0. We created an initial codebook based on line-by-line review of the content of the first two completed interviews and then tested this coding scheme against subsequent interviews to refine the codebook. Subsequent interviews revealed several additional codes that were added to the codebook until no new codes emerged from further interviews. When no new codes or themes were derived from interviews, we were satisfied that theoretical saturation had been reached. Interviews were coded in real time as data were collected and were reviewed by the first author, who used this information to make modest changes to the interview script. Following completion of the baseline interviews, the interview guide was further modified, with clarifying questions added to gather additional information regarding perceived environmental influences on health.

Two trained research assistants double coded 10 interviews to test reliability (90.7 %) of coding. Disagreements in coding were resolved by consensus. Following coding of all 50 interviews, 3 members of the research team independently reviewed "node reports" containing interview data classified under each of the major codes related to vacant land (physical condition of neighborhood, possible solutions). That information was then summarized in "node reports" that succinctly described major issues raised within each code. These summaries, and relevant interview segments, were then discussed in several rounds of team meetings, in order to identify broad and recurrent themes. This iterative process informed the framework through which we report residents' perceptions of vacant land, health, and safety.

RESULTS

Of the 29 study participants, 17 were men and 12 were women. Participants' average age was 42 and ranged from 20 to 65. All but 1 participant, who declined to answer, self-identified their race as African American. Annual household income was low, with 31 % of participants reporting less than $15,000, 35 % reporting between $15,000 and $35,000, and 24 % of participants declining to answer (Table 1). The study population was similar to the general neighborhood population according to corresponding census tract data, which shows 97 % African American population in both neighborhoods, median incomes of $15,417 and $17,743.[60]

Before being prompted by the interviewer about vacant land, nearly two-thirds of participants described their neighborhood as a decaying physical environment marked by abandoned homes and vacant lots. This paralleled the door-to-door assessment performed by our study team during recruitment in which we found 33 % and 17 % of land parcels in the two neighborhoods to be vacant (either vacant lots or abandoned homes; see Figure 1). Participants described the hallmark of vacant land as poor maintenance, indicated by significant overgrowth on vacant lots and dilapidated, abandoned houses.

Based on interview data, an overarching theme related to vacant land was ambivalence about the neighborhood. Participants often began their interview responses by describing the positive aspects of neighborhood life, but later described

TABLE 1 Description of study participants (n=29)

Characteristics	% or mean
Gender	
Male	59.0 %
Age (years, range)	42 (20–65)
Race	
Black	100.0 %*
Marital status	
Never married	59.0 %
Married	10.0 %
Divorced	17.0 %
Widowed	4.0 %
Separated	10.0 %
Highest Education	
Grades 9–12, no diploma	28.0 %
HS diploma or GED	41.0 %
College 1–3 years, technical	21.0 %
Bachelors degree	10.0 %
Income	
<$15 K	31.0 %
$15-$35 K	35.0 %
>$35 K	10.0 %
Refused	24.0 %

*n=28 (1 participant refused)

negative, and often conflicting, views. One participant first noted, "I like my neighborhood. It's clean. There's only like one abandoned house that I know of," but later described the neighborhood as "the ghetto" with "abandoned houses, crack-heads, people drinking" and vacant lots which make "the neighborhood look

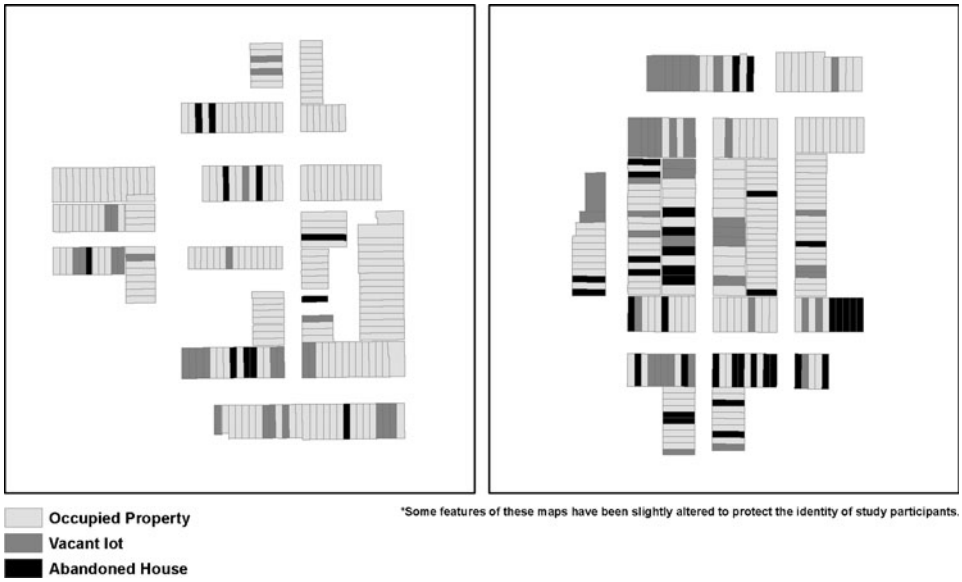

FIGURE 1. Vacant land status at study sites.

nasty." Other participants expressed ambivalence and a degree of detachment by hesitating to speak positively about the neighborhood: "How I view my neighborhood. I don't know. I can't say it's really all that good, because you see a lot of abandoned houses that mess up a lot of views."

Our analysis revealed that when prompted to talk about vacant land, participants emphasized the impact of vacant land on community well-being, as well as on individual physical and mental health. Participants also proposed a range of ideas regarding how to deal with vacant land in order to improve community well-being. Themes from each of these domains are discussed below and outlined in Table 2.

COMMUNITY WELL-BEING

Vacant land was perceived to influence community well-being by decreasing residents' control over neighborhood life, fracturing ties among neighbors, raising concerns about crime and safety, and exerting a negative financial strain on the community.

Participants described the presence of any vacant land as overshadowing positive aspects of neighborhood life and undermining attempts to improve the image or overall success of the community. One participant noted: "It really looks bad, [but] this neighborhood is not a bad neighborhood and the majority of the homes are not that old and most people do paint and cut [the] grass, wash their windows, clean their porches. But the blight of the abandoned homes really makes everything overall look bad."

Efforts to maintain the neighborhood were perceived as futile, contributing to a sense of helplessness and a perceived lack of community cohesion. Participants described

TABLE 2 Themes for the impact of vacant land on three health domains and community-generated solutions

Domain	Themes
Health Domains	
Community well-being	Overshadows positive neighborhood characteristics
	Loss of community control over neighborhood
	Fracturing of community members ties
	Crime and safety
	Fear of crime
	Financial strain
Physical health	Injury
	Trash build-up
	Rodents and other animals
Mental health	Negative emotions (sadness, depression, anxiety)
	Stigma
Community-generated solutions	
Vacant land	Playground
	Community garden
	Park space for elderly
	Regular cleaning and maintenance
Abandoned homes	Homeless shelter
	Subsidized housing
	Make homes look occupied even when boarded up
General	Provide residents with resources to do the work
	Provide authority to residents to do the work

fractures among neighbors when discussing homes becoming dilapidated and abandoned. Participants suggested that homeowners are dedicated to keeping their residences and neighborhood in good condition, while renters, who may be transient, are less invested. One participant noted of renters, "They looking for a place to stay, not to live. So they not gonna really respect the whole clean my side of the property today, I clean yours tomorrow. Everybody out for themself on that note."

Some participants felt that residents' with jobs were more responsible. Participants described being able to tell who was not working based on how they took care of their properties. One participant explained: "Mostly everybody on the block working people and those that do work take care of their property and those that don't work don't really take care of they property." A few participants also described how homes inherited from the older generation fall into disrepair in the hands of the younger generation, due to a lack of motivation or money.

Vacant land was also perceived to impact community well-being by raising concerns about crime. Participants felt vacant land attracted illegal activity because decaying structures and overgrown lots provided cover for people engaging in illicit behaviors. Participants reported drug dealers using vacant land to conduct sales and addicts using abandoned homes as "chill spots," or for prostitution and gambling.

Participants described fear stemming from criminal activity taking place on vacant land because it exposes people living in homes abutting vacant property to risks. Participants cited specific fears about potential gun violence, especially in relation to drug activity: "Because you got the drug boys there, you got the crack heads there . . . maybe one day a crack head might not have the drug dealer money, there might be a shooting. And there's little kids around here. Bullets ain't got no names." Another participant described fear of walking past vacant lots: "You got to watch yourself walking past the lots because you don't know who's out there. So you got to just watch yourself and watch your kids . . . And walking out there at night it's not safe at all."

Lastly, vacant land was perceived to impact community well-being by undermining the local economy. Participants felt that the property value of their home was significantly decreased when next to or near vacant land. Some participants noted that vacant land prevented new economic investments in the neighborhood and increased home owners' insurance costs.

PHYSICAL HEALTH

Participants reported that vacant land undermined physical health through unsanitary conditions and the potential for injury. Participants discussed as a threat to health the dumping of litter and large objects such as tires and appliances on rarely-maintained vacant land. One participant noted: "They're using abandoned buildings now for dumpsters, you know. . . Every time I look through the door I see somebody throwing trash next door to the abandoned buildings."

Trash build-up, along with vegetation overgrowth and vacancy, was described as contributing to the unwelcome and ubiquitous presence of animals. Participants were almost uniformly (83 % of participants) concerned about rodents, possums, and other animals, and the health hazards associated with them: "They got a lot of animals that runs around here, possums, raccoons, cats. It's unsanitary. It's not the cleanest place. . . We got abandoned houses. Sometimes we may think there's more cats on the block than there is people. . . And that scares me, because I don't like four legged animals…" Participants spontaneously raised these concerns about

animals in the neighborhood; there was not a specific interview question that prompted these concerns.

Participants felt abandoned homes posed an injury risk citing fires started by addicts and dilapidated conditions. One participant noted: "And a lot of times it's not safe walking past [the abandoned homes] because the one across from me looks like it's getting ready to cave in." Participants also discussed the injury risks of hypodermic needles, debris, and other sharp objects that may be hidden in the vacant lots, expressing concerned that children could fall on such objects when playing in the lots.

NEGATIVE EMOTIONS AND MENTAL HEALTH

Vacant land evoked a wide range of negative emotions from participants, including sadness and depression, often stemming from the buildup of trash on vacant land. One participant said: "[Vacant lots are] a big downer too, just because of all the trash and rotten smells. It just makes you question where you call home. You like, oh man I gotta come home around this crap again? It's a downer." Others expressed anger and frustration over feeling powerless to change the physical condition of their neighborhood.

Some participants were anxious about the harmful exposure children might experience playing on vacant land: "Falling, might go through a needle or anything, might see crack, violence. . .They don't need to be seeing that [stuff]. They gonna find out about it, but they don't need to be seeing that [stuff]."

Some participants felt a significant stigma associated with living in a decaying neighborhood and felt unfairly judged by outsiders:

> . . . I think that the neighborhood, like the housing and what's to offer here is not good enough for the people that are here. And maybe the people are looked at as being nasty and loud and disrespectful and they don't care about themselves and they don't care about people around them, from the outside that may be what it is. And so that's what they're treated like. . . If that's the way that society is viewing them, then this is where they put them. It's kind of like we're in a box. . . And how [are] people supposed to not feel agitated and mad and angry? So if I could change things I would. There wouldn't be so many vacant lots, so many abandoned houses, so many bars, delis, liquor stores, state stores, whatever you like to call them. There would be some changes.

For this participant, poor mental health outcomes, such as agitation and anger, were consequences of a powerful stigma and unfair treatment stemming from factors in the built environment, including vacancy and abandonment.

A small number of people expressed indifference about vacant land in their neighborhood. One participant said: "It doesn't really make me feel no way about it, because I can't do nothing about it. I see it all the time, so I'm pretty much use to it, so I don't feel bad or different." Although this participant did not feel vacant land affected him personally, he also expressed a sense of defeat. Others felt their neighborhood was an improvement from the location of previous homes.

COMMUNITY-GENERATED SOLUTIONS

Participants had many suggestions for ways to transform the vacant land to benefit health in their neighborhoods. Participants felt children lacked safe outside space in

which to play and proposed turning vacant lots into neighborhood playgrounds. They also suggested vacant lots be transformed to community gardens and park space for the elderly. Participants proposed that abandoned homes could be rehabbed into homeless shelters and subsidized housing. If that was not possible, they also thought all abandoned homes should be boarded up, and that the boards could be painted to make the home look more lived in.

Many participants felt the city held primary responsibility for dealing with the problem of vacant land in their neighborhood. They recognized current efforts to clean and maintain the lots, but felt the efforts took too long and did not involve enough lots or properties. Some participants felt that the city was unable or unwilling to invest resources to address the problem of vacant land and thought neighborhood residents should take responsibility to maintain vacant lots on their street: "If left un-kept, [vacant lots] really bring down the neighborhood. But that's why the people that live around there have to be responsible and go out there and not so much wait for the city. If people start putting a tire there, then somebody else will start throwing another tire. So you just got to police it . . . Pick up after yourself. Make sure you do something. Because just left un-kept it looks outrageous."

Cleaning and maintaining vacant land on their own appeared to be a source of pride and community mobilization for some participants. People spoke about gathering their neighbors to work on a project together and spoke with admiration for those who already did so. One participant stated: "Once I finish school I actually want to see if I can gather up a few people on the block and we can go in that lot and we can clean it up ourselves, because it looks like the city's not gonna do it. . . There's one lot that's further down the street. And the guy who lives next to it actually does his lot. . . And it looks beautiful." Some participants thought this would reflect positively on their neighborhood and even attract investment by the city. Others expressed desire to do such work, but lacked the proper resources and were unsure if they had the authority to do so.

Participants thought vacant lots that were cleaned and maintained by community members were safer because of the increased informal surveillance associated with such activities. One participant noted: "If the community is planting a garden, there's always going to be somebody in the neighborhood that's looking at that garden because usually when you have vacant lots and they plant stuff, it's usually the senior citizens that plant it. So they always gonna be looking. So you got eyes on it most of the time."

DISCUSSION

We document three domains of health—community well-being, physical health, and mental health—in which participants experience the impact of vacant land in their neighborhoods. We also report a range of community-generated solutions to vacant land. Findings from this paper highlight the importance to urban residents in this study of recognizing vacant land as a public health issue. The issue of vacancy takes on added significance in the wake of the housing crisis, which has left its mark in high vacancy rates across the nation.[61]

In Philadelphia, where high rates of vacancy were documented even before the housing crisis of 2008, residents reported that vacant land impacted community well-being through changes to the social milieu of the neighborhood. Illegal use of vacant land for dumping, prostitution, or drug sales, served to erode respect and

trust between neighbors, and create fractures between people in the neighborhood. Residents also felt that vacant land engendered fear among residents, who described staying in their homes to avoid being attacked. This mirrors prior evidence linking physical disorder to poor health through fear and the erosion of social relationships.[30,41,45]

Residents proposed several solutions for how to change vacant land from a negative to a positive influence in their communities, including transforming vacant lots to playgrounds and turning abandoned homes into subsidized housing. Some participants felt they could take these projects on themselves if given the proper resources by the city. A small number of participants already took informal ownership of vacant lots on their street by maintaining them or turning them into community gardens. They described satisfaction about using this work to exert a degree of social control over the neighborhood. The regular presence of people in a garden made people feel safe and provided what Jane Jacobs called "eyes on the street," an informal surveillance that was thought to discourage illegal activity.[62] These results suggest that urban residents may support vacant land policies that encourage community engagement and cohesion, and that residents see such actions as important to health.

There are several limitations to this study. First, this is a qualitative study which allows for an in-depth understanding of two neighborhoods in one city. The study does not purport to offer findings that are directly generalizable to the experiences of other neighborhoods and cities, but instead points to important questions to be addressed in other locales and with other sampling strategies and methods. Second, although we demonstrated similarity across several sociodemographic factors in the two neighborhoods, variation in the amount and type of vacancy and other aspects of physical disorder may differentially impact resident's subjective experience of vacancy and its effect on health. Finally, this is a qualitative study intended to document the range of residents' perspectives within these neighborhoods; we therefore make no assertions regarding causal associations between vacant land and health or the relative importance of vacant land compared to other neighborhood attributes that impact health. Instead, we emphasize community residents' perceptions, as these perceptions are likely to influence the desirability and acceptance of neighborhood-based interventions.

POLICY IMPLICATIONS

Strategies for dealing with vacant land fall under the broad rubric of urban planning and revitalization. Public health has a history of successful partnerships in this field, including advocating for improved urban housing conditions and building a significant knowledge base for the role of the built environment on health.[63] However, public health also contributed to the deleterious effects of 1950s and 1960s urban renewal projects through the development of neighborhood blight guidelines, which resulted in the decimation of many thriving low-income communities.[63] As cities seek to address the problem of vacant land and neighborhood blight without repeating the mistakes of the past, we recommend that public health officials, practitioners, and scientists actively partner with individuals, communities, and cities, to create and test new urban revitalization solutions that support health.[64] Notably, in this study, residents did not propose or advocate for policies of "blight eradication" through demolition of vacant homes

and buildings. Rather, residents emphasized filling vacant properties with purpose, people, and active use. This distinction may be critical to the acceptance of neighborhood stabilization programs.[65]

There are several legal tools that cities can use to address dilapidated, vacant land, including building maintenance codes and the tax sale process.[9,10] Cities can levy fines or liens against property owners who fail to maintain safety and health standards. The mayor of Philadelphia, for example, recently announced a new aggressive policy to fine owners of blighted land $300 per day for each city code violation.[66] Noncompliant owners will be taken to "blight court," facing seizure of personal assets if they don't fix their property. Another example of a city working to reduce vacancy is Baltimore's "Vacants to Value" initiative started in November 2010.[13,67] The program aims to reduce blighted homes by a variety of measures, including fines, providing forgivable loans to those wishing to buy property, and creating a central database of vacant property. Flint, Michigan has taken a comprehensive approach to managing vacant land with the Genesee County Land Bank. [68] Land banks are used by cities to act as a clearinghouse for the management and disposition of all tax-foreclosed vacant properties, with the goal of developing a coordinated approach community investment and neighborhood revitalization.

The success of the Philadelphia, Baltimore, and Flint policies will depend, in part, on each city's commitment to deploying staff and resources to ensure policy enforcement.[9,10] Additionally, there are several Philadelphia agencies dealing with vacant land, including the Redevelopment Authority, the Public Property Department, and the Philadelphia Housing Authority. A lack of coherent strategy and communication across these agencies can hinder progress.

In addition to leveraging legal tools, cities can partner with local organizations and individuals to empower neighborhood-based maintenance of vacant land. Evidence from this study shows that residents may be eager to clean and maintain vacant land themselves, but may lack the resources to do so. Cities could provide low cost resources, such as large trash bags, protective gloves, and landscaping tools, along with training, to residents who agree to clean and maintain the lots, thereby improving the physical environment while promoting community social interactions and cohesion among residents. Municipalities can also assist organizations like the Mantua Community Improvement Committee (MCIC), which employs local residents to clean trash and weeds from vacant lots.[69]

An innovative example of a city partnering with a nongovernmental organization is the Philadelphia Vacant Land Management program run by the Pennsylvania Horticulture Society (PHS).[70] The program, funded in large part by the City of Philadelphia, has cleaned and greened over 4,500 vacant lots. The city uses maintenance code violations to authorize the greening treatment, which involves clearing trash, planting new grass and trees, and placing a simple wooden fence around the perimeter of the lot. Within the areas surrounding "cleaned and greened" properties, investigators have documented higher property values of surrounding homes, as well as lower rates of gun crime, and stress, and higher levels of physical activity among neighbors compared to areas that did not receive the intervention.[71,72] Findings from this project also suggest that such initiatives are aligned with community residents' concerns and take a step toward addressing community-generated solutions that prioritize restoring vacant land to active use.

CONCLUSIONS

As public health researchers increasingly seek to understand the impact of neighborhood conditions on health, residents' themselves can provide valuable insights regarding local problems and their solutions. Interventions aimed at reducing the impact of neighborhood conditions on health may maximize their success by incorporating local priorities and concerns into their design. Furthermore, researchers should actively engage policy makers to ensure health and safety are addressed in the management and disposition of vacant land and the implementation of urban renewal policies.

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