

Diane Rhoden, MD- 03/2021

Topic: Residents of Public Housing

Working among my patients has been a learning experience in itself. In my first 9 months I treated more insect bites, tinea corporis, MRSA infections and asthma than in all my years combined at my job in Bushwick and the Lower East Side. I have written scores of letters to NYCHA about infestations, mold and long standing repairs. The main difference between previous clinics and this one is that these patients live in a development project. Like most projects, overcrowding, violence and deteriorating housing units cause frustration but has also led to disparities in health that do not exist in other contexts. In fact, after working in the projects for 2 months, I felt that something needed to be done. I wondered why pest infestations, mold and animal intrusions were not addressed by the building owners. After experiencing an infection transmitted while working with my patients, I finally experienced what my patients live through on a daily basis. In this essay, I intend to describe the social needs of Residents in Development projects, describe the existing resources for these neighborhoods, discuss strategies for change and finally devise strategies to implement change in this patient population.

The purpose of public housing is to provide decent, safe and affordable housing for low income families who cannot afford private housing.¹ According to the Department of Housing and Urban Development, (HUD) official website, candidates for housing are "...low-income families comprised of citizens or eligible immigrants....a family with or without children, elderly family, near-elderly family, disabled family, displaced family, the remaining member of a tenant family, or a single person." In order to live in the projects, one must have a lower income limit at 80% and a very low income limit at 50% of the median income for the county or metropolitan area where they live.² The U.S. Department of Housing and Urban Development (HUD) distributes funding to the housing agencies who are responsible for managing the houses and keeping housing affordable to the poor. There is an application process and interview used to weed out those with poor habits or behaviors that would disrupt their neighbors. If someone's income increases above a certain limit, they can be asked to leave the housing project. With the rigorous steps that it takes to get into one of these buildings, it is shocking to see the horrible state in which they are kept.

In an Article written in the *Atlantic*, it is stated that "...violence and neglect led to the demolition of previous generations of public housing... the rats, leaks, mold, and lead paint that have now brought the New York City Housing Authority, by far the nation's largest operator of public housing, under the oversight of a federal monitor." Public Housing has been left to crumble, in many cases, into centers of violence, delinquency and hopelessness, according to this article, and are bound to be destroyed in the future. The irony is that many public housing developments were erected after private homes owned by African Americans and other minorities were cleared.

¹ PUBLIC HOUSING DEVELOPMENT." *PUBLIC HOUSING DEVELOPMENT*, <https://www.hud.gov/programdescription/phd>. Accessed 01 03 2021.

² PUBLIC HOUSING DEVELOPMENT." *PUBLIC HOUSING DEVELOPMENT*, <https://www.hud.gov/programdescription/phd>. Accessed 01 03 2021.

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³ The New York Housing Authority owns 324 buildings and has 600,000 residents. In 2010, (NYCHA) was the largest public housing organization in the United States operating 2,596 residential buildings, 334 developments, and housed 5 % of NYC's residents. NYCHA has a central database called the NYCHA Tenant Data System, which logs all apartment-related complaints. It is often bogged down in red tape and bureaucracy making it difficult to respond to work orders and requests for repairs by residents. One of the most common complaints is bedbugs. Aside from being an itchy nuisance it can lead to allergic dermatitis and can lead to loss of property. Residents often complain about how bedbugs "...result in adverse economic consequences, including extermination costs, and damaged furniture".⁴ Patients have talked about having to throw out all of their furniture and not replacing the furniture because they just do not have the money. According to Gounder, bed bugs are more numerous in homes with multiple occupants, a disabled head of household or lower income status.

In addition to bedbugs, the general condition of the building seems to also bother residents. In a study about how pest infestation affects mental health, the appearance of mold also reduces the residents quality of life as, "... dampness and mold were associated with depression, explained in part by a lack of perceived control for residents over their home environment."⁵ I have had at least one patient complain that she had to throw away her clothes and several pieces of furniture. She also started wheezing and had considerable trouble breathing in her apartment. She slept in the living room for almost a year until the building management decided to assess the problem. Knowing that she cannot afford to live anywhere else keeps her unhappily adapting to the changes but also brought her into my office for treatment of her asthma.

Lastly, mice and cockroach infestations have always plagued over crowded living spaces but has also been associated with depression. According to Shah's article, the "association between cockroach infestation and high depressive symptoms persisted after adjusting for age, race/ethnicity, and sex (2.9, 95% CI 1.9–4.4)." This study result would suggest that when people feel like they are losing control even within their home, it leads to hopelessness and depressive symptoms. Not only do residents lose hope but in a reasoning called "linked health fate", the fear

³ Public Housing Becomes the Latest Progressive Fantasy A new generation of activists seeks to revive an old urban policy, despite its troubled history." *Public Housing Becomes the Latest Progressive Fantasy A new generation of activists seeks to revive an old urban policy, despite its troubled history.*, 2019, <https://www.theatlantic.com/ideas/archive/2019/11/public-housing-fundamentally-flawed/602515/>. Accessed 25 11 2021.

⁴ Gounder, Ralph. "Bedbug complaints among public housing residents-New York City,." *J Urban Health*, vol. 91, no. 6, 2014, pp. 1076-1086.

⁵ Shah, Snehal. "Housing Quality and Mental Health: the Association between Pest Infestation and Depressive Symptoms among Public Housing Residents." *J Urban Health*, vol. 95, 2018, pp. 691–702. *CrossMark*.

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of death from housing related factors paralyzes patients from seeking out care.⁶ Residents believe that everyone, including themselves, will be unhealthy and will eventually die earlier because of housing related problems. The inefficiency of the Tenant database system has caused residents to lose hope and despair of their current living situation. Many do not see any other alternative.

In light of the way living conditions can lead to hopelessness, there are some resources that housing residents have at their fingertips. The New York City Housing Authority has a website that allows residents to log complaints about any issue from Domestic Violence, Extermination Visits, Lead Inspections, Mold and issues concerning Heat.⁷ Residents have access to the housing agency's work order application online and can call the various departments to get help. The problem most patients complain about is the length of time to hear back from these agencies. Some patients wait years before they hear back from the NYCHA authorities, if at all. This can be very frustrating for any family and causes hostility and distrust to develop. With the current shortcomings of the current system, it might be a good idea to imagine a solution that could replace public housing.

One way to deal with low income housing is to "...support housing controlled by community land trusts, tenant cooperatives, and private charitable organizations."⁸ Building developments that are smaller and handled by non-government corporations might cut the red tape and ensure that the buildings and needs are better handled and thus lead to less health risks.⁹ The current public housing, on the other hand, has been known to pose health risks to families.

One of the major complaints of tenants in Development projects is poor maintenance and extermination policies. One novel form of extermination researched in 2003 determined to change the look of extermination by adding in patient education and removing pesticides. The program was officially known as integrated pest management (IPM) and involved sanitation, building maintenance and minimal use of pesticides because of their toxic effects on children and people who suffer from asthma. IPM approaches pest extermination from a home hygiene

⁶ Raudenbush, Danielle T. *Health Care Off the Books: Poverty, Illness, and Strategies for Survival in Urban America*. 1 ed., Oakland, University of California Press, 2020.

⁷ Customer Contact Center: NYCHA." *Customer Contact Center: NYCHA*, <https://www1.nyc.gov/site/nycha/residents/customer-contact-center.page>. Accessed 01 03 2021.

⁸ Public Housing Becomes the Latest Progressive Fantasy A new generation of activists seeks to revive an old urban policy, despite its troubled history." *Public Housing Becomes the Latest Progressive Fantasy A new generation of activists seeks to revive an old urban policy, despite its troubled history.*, 2019.

⁹ "Public Housing Becomes the Latest Progressive Fantasy A new generation of activists seeks to revive an old urban policy, despite its troubled history." *Public Housing Becomes the Latest Progressive Fantasy A new generation of activists seeks to revive an old urban policy, despite its troubled history.*, 2019, <https://www.theatlantic.com/ideas/archive/2019/11/public-housing-fundamentally-flawed/602515/>. Accessed 25 11 2021.

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approach, denying i food, water, shelter, and movement while discerning whether or not pesticides are necessary. At the end of the study, it was shown that IPM yielded less mice and cockroach sightings, but made no statistically significant changes to the presence of mice when compared to the control.¹⁰ Even though it wasn't perfect, this is a testament to the need for education, team approach to extermination and the ability to exterminate without the use of pesticides.

In another article, mothers of children with asthma, living in public housing were interviewed and samples of air, urine, dust were taken. It was found that the use of pesticides were a possible trigger for asthma attacks, along with fragrances. One of the end goal recommendations was for mothers to contact the building manager to incorporate IPM to reduce the use of pesticides and thereby reduce asthma attacks. At the end of the study they provided a brochure asking residents to cover food, even pet food, find all leaks and dripping water and reduce clutter in the home. Taking these steps makes the use of pesticides less necessary and therefore less harmful to the children.¹¹

Although less supported by the literature, another alternative to public housing is public assisted housing. According to Suglia's editorial on *Subsidized Housing and Health: Time for a Multidisciplinary Approach*, "Federal rental assistance programs were developed to partly address these issues enabling families to live in mixed-income housing and mixed-income neighborhoods; however, the evidence supporting the health benefits of rental assistance programs is mixed."¹² This statement seems to indicate that even though residents are brought out of the toxic living environment of the "projects" the same dismal loss of control of one's life seems to follow this group because of poverty. Suglia also suggests that the public housing is not just crumbling but is now affecting the health of its occupants. Chronic health concerns such as asthma, hypertension, second hand smoke, exposure to air pollutants and even depression symptoms are being traced back to housing.¹³ How do we as health care providers help the healing of these public developments? Suglia suggests that the answer lies in multiple disciplines. Providing healthy housing will require a balance between care of the whole person socially, mentally and physically while considering the role of the environment in the life of the community.

¹⁰ Kass, Daniel. "Effectiveness of an Integrated Pest Management Intervention in Controlling Cockroaches, Mice, and Allergens in New York City Public Housing." *Research*, vol. 117, no. 8, 2009, pp. 1219-1225.

¹¹ Perovich, Laura. "Reporting to parents on children's exposures to asthma triggers in lowincome and public housing, an interviewbased case study of ethics, environmental literacy, individual action, and public health benefits." *Environmental Health*, vol. 17, no. 48, 2018, pp. 1-12. *BMC*.

¹² Suglia, Shakira F. "Subsidized Housing and Health: Time for a Multidisciplinary Approach." *Am J Public Health.*, vol. 108, no. 8, 2018, pp. 975-976. *AJPH Editorials*.

¹³ Suglia, Shakira F. "Subsidized Housing and Health: Time for a Multidisciplinary Approach." *Am J Public Health.*, vol. 108, no. 8, 2018, pp. 975-976. *AJPH Editorials*.

After working in a clinic dedicated to public housing residents, I have learned that these patients are among the sickest patients that I have cared for since completing ICU and residency inpatient training. Patients living in public housing may have some of the highest healthcare utilization rates in the population. In a study conducted in Manitoba Canada, it was found that public housing residents had a higher hospitalization rate than the general population but seemed to have a decrease in medical emergencies after moving into public housing. Also, after moving into public housing, residents began to seek out medical care more often, as it was found that, “The incident rate during the year in public housing was significantly higher than the year before the move-in date.”¹⁴ One explanation for this is that without public housing, the insecurity of homelessness and shelter life takes a toll on health. Many patients start medical care once they have settled into housing and this is where medical clinics can have the greatest impact. Public housing medical practices need dedicated social work teams to address the many health and sanitation problems that our patients face.

Since primary care visits increase when patients move into public housing, maybe the stakeholders, like the housing authority (NYCHA) and community counsel’s could invest in orienting new residents to the clinic and offering the medical services right away. At that time any structural and pest related apartment problems can be addressed by the clinic social worker and any problems in mental health can be addressed by a designated mental health professional. Co-locating health services has been found to help patients to get the most out of their care. The design is called the “ Collaborative care model” which, “... employs evidenced based medications and psychosocial treatments for goal focused therapy, with goals such as reducing readmissions...emergency room visit due to anxiety.”¹⁵ If the project stakeholders want to see a visible improvement in their neighborhoods, co-locating the medical care with a lot of the other social problems could help the project population become healthier. For example, giving the social workers access to the tenant complaint database may allow more incidences of pests, mold and even violent or noisy behavior to be reported in confidence.

Co-locating mental health, social work and primary care could also help to make early diagnosis of depression, anxiety, postpartum depression, PTSD and other forms of psychosis easier in the setting of public housing. Clinics could get involved in depression screening all new residents to ensure that they get the help they need close to home. In this model the Primary care provider, social worker and the mental health specialist shares the electronic medical record and can work

¹⁴ Hinds, Aynslie. “Public housing and healthcare use: an investigation using linked administrative data.” *Canadian Journal of Public Health*, vol. 110, 2019, pp. 127-138. *CrossMark*.

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together to make sure the medical, psychological and social challenges are all addressed.¹⁶ This is the best model, as it has been found that “... 30% of medical outpatients and patients admitted to acute general hospitals have behavioral health comorbidities.”¹⁷ Stakeholders like the building authority might benefit from providing early access to medical and mental health, because it will directly improve the lives of the residents and might improve the reputation of public housing. However, involving social work might also cause more expense for building maintenance if more of the complaints are being processed and followed up. The more repairs that are made as a result of consultation with a Social worker, the more the building authority will have to spend on maintaining the buildings. If building management and the Community counsels can come to a balanced guideline on how to help the quality of life of residents without bankrupting the building authority, I think that this plan would work well for everyone involved.

Lastly, I think the expansion into home care for housing residents will help to ensure that patients get the needed attention even if they are elderly. Since the beginning of COVID-19, more and more practices are completing virtual medicine and getting into people’s homes at the touch of a button. Certainly, adapting telemedicine has made it easier for me to communicate with my patients who cannot come to the clinic. Unfortunately, this technology has not helped my patients who are not tech savvy. Home visits might be a good alternative for patients who have difficulty even coming to a clinic. Attending multiple doctors visits might be difficult for residents who already have many comorbidities. As was mentioned before, housing residents tend to have greater health risks than the general population and might need to have several consultants on their team. Starting a Home visit program similar to Village@Home, would help to centralize care in the development. According to Emanuel, providing one experienced nurse practitioner to perform a variety of tasks could be a solution to the poor health outcomes seen in the elderly project population. These providers are writing “.. prescriptions, drawing bloods, changing catheters, caring for wounds, administering breathing treatments and the rest.”¹⁸ The rest can also refer to ensuring that hygienic conditions exist within the home, especially for the elderly who have low mobility and are at greater risk for bedbugs, cockroaches and rodents. This program works especially well for homebound patients, people who were recently discharged from hospitals and post-acute facilities. For issues that are more practical in nature, a community health worker can be assigned to close the gap between healthcare needs and problems that are centered around maintenance of the building.

One of the best aspects of building a care collaborative is that it could directly employ some of the residents of the project complexes. Community Health workers are not home health aides,

¹⁶ Emanuel, Ezekiel. *Prescription for the Future: The Twelve Transformational Practices of Highly Effective Medical Organizations*. New York, Public affairs, 2017.

¹⁷ Emanuel, Ezekiel. *Prescription for the Future: The Twelve Transformational Practices of Highly Effective Medical Organizations*. New York, Public affairs, 2017.

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social workers or doctors. In fact they could come from the community where they serve. These individuals, "... help patients address the underlying social, financial and behavioral causes of their health problems."¹⁹ These workers make the difference in poor communities with fewer social support systems, like in the housing developments at the center of this discussion. These workers can help restore the resident's sense of control over the basic needs of life. I am pretty sure that the community counsels could find ample people who could either volunteer or work for a small salary to accomplish the goal of better quality of life in the housing developments. This may also provide working opportunities for community members making them more competitive on the job market. For people that have felt powerless to change their living conditions, being able to help themselves advance in the community could change their outlook on life.

In conclusion, I believe that in many ways city authorities have tried to abandon the projects, hoping that the problems will go away on their own; or worse that they will one day be removed. When I first started researching I thought that replacing the projects was the only solution because of the constant problems concerning pest infestations, mold and the social ills that plague public housing. However, I discovered that many of these problems exist because being poor has trapped many of the residents in a cycle of inefficiencies that need reform. Through alternative housing, implementing various forms of extermination and resident education and building in health care systems, we can begin to see changes in the community and the outlook of the occupants. As a healthcare professional I can see unexplored areas of service such as through social work and mental health. Both sectors can help the patients in a holistic way and meet the goals of community and governmental stakeholders. Through this research I have gained a broader understanding of how governments can be held accountable to fulfill responsibilities to those they serve. Envisioning a decent living space for those who live in public housing is becoming easier every day, especially as I see that the residents are a great part of that solution.

¹⁹ Emanuel, Ezekiel. *Prescription for the Future: The Twelve Transformational Practices of Highly Effective Medical Organizations*. New York, Public affairs, 2017.

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