Housing as a Social Determinant of Health

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6/30/2022
“Without stable shelter, everything else falls apart.”

Matthew Desmond, *Evicted*
Housing is Fundamental to Health

- Public health emerged as discipline based on studies of infectious disease in tenements
- Yet---housing markets in US and Western Europe marked by high rates of inadequate housing
- One in three Americans live in rental housing
  - HALF of renters pay more than 30% income in rent
  - 1/40 renters formally evicted annually
  - 5.5 informal evictions for every formal eviction

Housing Insecurity: Inadequate Housing Quality and Housing Instability

- **Inadequate Housing Quality**
  - Poor housing and neighborhood conditions
  - Housing Crowding

- **Housing Instability**
  - High cost burden
  - Cost-driven moves
  - Foreclosures
  - Evictions
  - Homelessness

Housing Insecurity ---> Poor Health

- **Mechanisms include:**
  - Material Hardship
  - Stress
  - Environmental/Infectious Exposures
  - Social Network Disruptions
  - Barriers to Healthcare

- **Negative feedback loop**
  - Housing insecurity → poor health → housing insecurity

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Conceptual framework for the relationship between housing policy and population well-being

Figure 1  Conceptual framework showing the structural-environmental-biological process through which housing policies, in the context of structural oppression, affect inequities in population well-being.

Housing Policies Shaped by Structural Racism

- Despite centrality to health, policies have not supported quality, affordable housing for all
  - Limited Federal support for production, protection, preservation of affordable housing
  - Housing Choice Vouchers—1/4 who qualify

- Housing policies shaped by **structural racism**

- Redlining, denial of mortgages, lack of enforcement of fair housing laws, predatory lending → gross racial inequities
36 units available and affordable for every 100 extremely-low-income households; CA has 23
Fewer than \(\frac{1}{4}\) low-income at-risk households receive rental assistance; \(\frac{1}{3}\) of elderly (low income, at risk) households do.
Housing insecurity contributes to racial disparities in health

- Housing Insecurity is a major (if underappreciated) contributor to racial disparities in health
- Racial disparities in health result from racism
- Housing insecurity on the pathway between racism and racialized health disparities
Inadequate Housing Quality

- Crowding
- Poor ventilation
- Poor heating/cooling/electricity
  - “energy insufficiency”
- Poor waste disposal
- Communal facilities
- Lack of stove/oven
- Dirty, old carpet
- Damp and moldy conditions
Health manifestations of inadequate housing quality

- Some examples:
  - Lead exposure $\rightarrow$ worse child development (cognitive impairment, birth defects, etc.)
  - Asbestos, pesticides, and chemicals used in construction $\rightarrow$ cancer
  - Lack of cooking facilities (i.e., stove/oven) $\rightarrow$ poor nutrition
  - Mold, poor ventilation, crowding $\rightarrow$ asthma & respiratory infections
  - Poor housing quality $\rightarrow$ increased rates of anxiety and depression

Health manifestations of inadequate housing quality

More examples

- Faulty wiring → house fires
- Poor ventilation, old appliances, lack of detectors → carbon monoxide poisoning
- Poor construction, lack of window guards, broken staircases & elevators → unintentional injuries
Inadequate housing quality and housing crowding are associated with COVID-19 infection and mortality

- Each 5% increase in households with poor housing conditions in a county associated with:
  - 50% higher risk of COVID-19 incidence
  - 42% higher risk of COVID-19 mortality
- Housing crowding associated with higher rates of COVID-19 infection

Formerly redlined neighborhoods associated with poor health

- Limited access to health services
- Food deserts
- Noise pollution → poor sleep
- Lack of nature associated with higher rates of anxiety and depression
- Higher rates of violence
- Higher rates of stress

Poverty in neighborhoods is associated with poor health outcomes

- Neighborhoods with greater poverty are related to:
  - Lower birth weight
  - General mental health
  - Childhood health
  - Obesity and higher BMI (mixed outcomes)

Threat of eviction associated with poor health

- Worse physical health
  - Increased odds of detectable HIV viral load
- Worse mental health
  - Greater depressive symptoms
- Increased ED visits
- Substance use relapse
- Cognitive impairment in elementary-aged children
- Increased all-cause mortality

"Eviction And Health: A Vicious Cycle Exacerbated By A Pandemic," Health Affairs Health Policy Brief, April 1, 2021.DOI: 10.1377/hpb20210315.747908
Homelessness is most severe form of housing insecurity

- Disproportionately impacts Black and Indigenous Americans
- Concentrated amongst extremely low-income households
580,466

Homeless persons report worse health status than US or poverty populations

**Fair or Poor Health**

- **Homeless**: 37%
- **US Poverty Population**: 24%
- **US Total Population**: 10%

Percentage of Respondents
Homeless people have higher prevalence of chronic diseases than the general population

Homelessness is associated with poor health outcomes in adults

- High prevalence of co-occurring disorders
  - Mental health problems, SUD
- High prevalence lifetime exposures to health threats
  - ACEs, exposure to racism, poverty
- High prevalence exposures while homeless
  - Victimization, environmental exposure, infectious disease
  - Poor diet, food insecurity
- Low access to preventive, longitudinal healthcare (physical, mental)
Homelessness in children common, morbid

- ¼ people experiencing homelessness in US are children living with their parents/guardians
- Modal age of homelessness <1
- Homelessness in children associated with:
  - Asthma
  - Mental health problems
  - Poor school outcomes
  - Increased ED visits, hospitalizations
- Homelessness associated with
  - Poor maternal health outcomes
  - Pre-term birth
  - Poor perinatal health outcomes
Homeless population is aging

- ~half of homeless single adults 50 and older
- Homeless adults in 50s and 60s have health similar to those of adults in their 70s and 80s
Homelessness associated with very high mortality

- 3-8X expected based on age
Housing improves health conditions

- Housing provides
  - Protection from the elements (e.g., freezing temperatures, extreme heat)
  - A place to comfortably rest
  - A place to wash, urinate, defecate
  - Lowers risk of infectious diseases
  - A place to cook healthy meals, store food and medicine
  - A stable address for receiving services, mail

Everyone can be housed

- Everyone needs housing they can afford
- Some need services wrapped around to keep them housed, some don’t
- Housing MUST be offered on Housing First basis
  - Start with housing without preconditions
  - Provide services needed to allow people to thrive
  - Do not make use of services a precondition
“When you’re drowning, it doesn’t help if your rescuer insists you learn to swim before returning you to shore.”

Michael Kimmelman, “How Houston Moved 25,000 People From the Streets Into Homes Of Their Own” NY Times June 14, 2022
Permanent Supportive Housing (PSH) is the answer for those with chronic homelessness and behavioral conditions

- Subsidized housing with voluntary supportive services for chronically homeless individuals
  - **Housing First** model
    - No requirement of sobriety or treatment
Permanent Supportive Housing keeps people housed

- Meta-analysis found that PSH increases long-term housing stability for those with moderate and high support needs

- An RCT found:
  - PSH housed 86.4% of participants (vs. 36.2% usual care)
  - Participants stayed housed for 92.9% of 3-year follow up period
Permanent Supportive Housing improves some measure of health and healthcare access

- Positive benefits for:
  - HIV outcomes (new diagnosis, viral load, mortality)
  - Medication management
  - Preventive screenings
  - Non-acute healthcare utilization (mental and physical health)


Raven, Niedzwiecki, & Kushel. (2020) A randomized trial of permanent supportive housing for chronically homeless persons with high use of publically funded services. Health Services Research.
Final thoughts

- Housing is foundational to good health
- Lack of affordable, high quality housing is a major contributor to poor health outcomes
- Housing insecurity is directly related to structurally racist policies
- Housing on the pathway between racism and poor health
- Everyone can be housed if provided on housing first basis
There is no medicine as powerful as housing

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