



Building on the Analysis of Housing as a Social Determinant of Farmworker Health:

New Directions for Research, Advocacy, and Action

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Using analyses of housing impacts on health as a springboard for future efforts

- Housing and neighborhood clearly impact FW health in many ways. We now need to build on these insights:
 - For more strategic farmworker advocacy
 - To plug holes in current service systems and develop better intervention designs
 - To guide priorities for ongoing research to improve farmworker health
- We must first explore the implications of current research in 4 key areas (each with promise for more effective advocacy and program design):
 - Map out implications of newly-emerging insights about processes through which stress contributes to negative health outcomes
 - Work to better understand how interactions among multiple psychosocial stressors affect farmworkers' lives
 - Detail interactions between psychological and physiological processes and implications more thoroughly
 - Identify additional aspects of farmworkers' lives' and social universe dynamics (beyond sub-standard housing) which give rise to distinctive types of stress

Key insights from review of housing-related social determinants of FW health

- The negative health impacts of crowded housing and neighborhood environment stem in large measure from chronic stress.
- Social network dynamics can have either positive or negative impacts on FW health
- Negative factors in the social environment have cascade effects—suggesting that the most powerful interventions will be those which can turn a “vicious spiral” into a “virtuous spiral”.
- Generalizations from broadly-framed epidemiological analysis (e.g. about the relationship between socioeconomic status and health) need to be “unpacked” to adequately understand the complex interactions at play

Focus on housing → panorama of stressors

- Housing conditions matter. But other “domains” of the social universe FWs live in are important sources of stress also:
 - **Work environment** —treatment by supervisors, piece rate pressure, lack of sick leave, seasonal unemployment, chronic underemployment, threat of dismissal due to lack of work authorization, barriers to promotion or changing jobs for the undocumented
 - **Personal/family life management** —Coping with recurring cash flow crises, extended family/social network demands, within-household language barriers, ebb and flow among HH members, trauma of migration, long-term separation from hometown relatives,
 - **Legal context** —with “illegality” being the norm (>50% of FW’s lacking legal status) the “gaze of surveillance” is constant, any new move entails some risk, uneven access to social/public health programs in “mixed status” HH’s, dangers of driving without papers, the paradoxes inherent in dreams of children’s educational future
 - **Societal context** —Rampant anti-immigrant political rhetoric, racism (especially affecting indigenous minorities), barriers to participation in community decision-making, burdens of navigating bureaucracies which demand literacy and online access

Thinking about the social dynamics that generate stress

- Stress is real, not an ill-defined, vague “emotional” concept. Stress is measurable and measurably correlated with a wide range of negative health outcomes.
- Bad housing, working conditions, and social context negatively impact FW health not only through physical risk but, perhaps even more importantly, via [psychological/behavioral](#) and [physiological](#) responses to stress.
- Stressful social environments have not only [immediate](#) negative impacts on farmworkers and their families but, also, [long-term](#) multi-generational impacts on FW children. The stakes are higher than is generally recognized.
- Individuals, families, communities are resilient. Stress can be ameliorated and, to some extent, managed. But the challenge is to do this more intentionally and more effectively, in part by harnessing social networks
- At the same, program interventions (e.g. counseling) are not enough. Societal change provides the only solutions for some endemic stress-related problems.

The negative physiological impacts of stress

- Velasquez-Manoff (2013) highlights “chronic social defeat” as a particularly problematic “flavor” of stress pointing to the research showing that early-life experience of stress lingers on indefinitely. McEwen and colleagues frame this as “biological embedding” of social status.
- There is widespread agreement that stress heightens chronic levels of cortisol (via the hypothalamic-pituitary-adrenal axis) is associated with elevated blood pressure, chronic inflammation, heart disease, arthritis, impaired immune functioning, cancer
- Early-life stress has lagged impacts on subsequent psychological/behavioral health (e.g. anxiety, emotional control).
- But there are complexities. For example, some analyses showed impacts on girls but not boys. And the points in development and life when stress occurs also matter (Hertzman and Boyce 2010)
- Geronimus (2015) and her colleagues found poverty to be correlated with shorter telomere length (a stress-mediated genetic indicator of biological aging and correlate of chronic and infectious disease).
- Yet, their research (and others) also suggests that social networks can buffer the impact of poverty by modulating ways in which poverty is experienced.

“The Genetic Ripple Effect of Hardship”

- Stressful early life events and social environment impact the next generation (Burghy et al., 2012) and possible multiple generations. Epigenetic processes are well-documented although research is generating important new insights about details.
- Some of these next-generation impacts are behavioral. They appear to stem from epigenetic changes in neurological processing that affect mental and behavioral health.
- Other physiological changes are also well-documented—e.g. research on how mothers’ malnutrition in WW II affected their children and grand-children’s metabolism --e.g. obesity and diabetes (Mukherjee 2016).
- The societal stakes in ameliorating stress in FW’s lives are higher than most policymakers and social program planners (even professionals) realize.

“I’m dancing as fast as I can”: cognitive and other consequences of chaotic environments

- Mani et al. (2013) found that poverty generally constrained cognitive functioning—but, more relevant for FWs, that stress at harvest time had a direct impact on cognitive functioning. More problems-→less ability to solve them.
- An implication for FW well-being is that constant juggling of efforts to secure work and deal with cash flow, transportation, and other problems contribute to a negative spiral.
- For low-SES children, household chaos, “unpredictability” impedes academic achievement and is correlated with emotional distress years later
- Head Start researchers recognized early on how HH environment affects parent-child interactions and programs wisely sought to enhance “family resiliency” but the K-12 school system has lagged way behind.

Evidence from NAWS of distinctive stressors affecting farmworkers' mental health

- Analyses of data from the 2009-2010 NIOSH supplement to NAWS provide important insights about how some distinctive aspects of FW social and economic life may contribute to depression. Strong correlations:
 - with unauthorized status ($p < .0001$)
 - with being unaccompanied worker ($p < .0001$)
 - with being a seasonal, not a year-round worker ($p < .0001$)
 - with fear of being fired from current farm job ($p < .0001$)
 - with a respondent's belief- he or she would not be able to get a non-farm job within 1 month ($p < .0005$)
- But dynamics of social determinants of health (SDOH) are complex--e.g. limited-English is only marginally linked to depression (perhaps due to mitigation by family/village networks), there is no statistical difference between direct-hire and FLC employees (probably due to pros and cons of each)

Advocacy re SDOH in FW's Social Universe

- Much of the research on stressors and health has been done on urban populations. But stressors experienced differently in farmworkers' lives--due to village/migration network affiliation, US community context, locally prevalent crop-tasks.
- There is limited research on how lack of legal status contributes to overall stress over time— despite powerful research by Roberto Gonzalez on the lives of undocumented young adults and findings from an APA task force on psychological impacts. But there is little on physiology, stress, possible epigenetic impacts.
- Advocacy is needed to assure diverse FW sub-populations are included in future research on stress, epigenetic change, and health. Priorities might include:
 - a focus on farmworker women (gender roles make a difference)
 - indigenous farmworkers (cultural context makes a difference)
 - legally-authorized vs. unauthorized farmworkers
 - how different configurations of family and village networks affect stress
 - how local institutions (e.g. schools, employers, social programs) can make a difference

Social capital: the bright side and the dark side

- Alderete, Vega and Aguilar-Gaxiola pointed to the “immigrant paradox” in farmworker mental health (which decreases from the 1st to the 2nd generation of immigrant FWs). This suggests traditional Mexican social networks play a role in mitigating stress.
- But Cecilia Menjivar has showed that immigrants’ traditional social networks decay in the cauldron of contemporary economically stressed U.S. life.
- Our case study research in Parlier in the early 1990’s and, subsequently, in Arvin, CA and Woodburn, OR a decade later, for example, underscored that immigrant farmworkers in dominant village/migration networks had more resources than others.
- Social capital is a powerful potential resource for individual, family, and community well-being—but it is constantly threatened, unevenly distributed, and needs to be nurtured.

Implications for FW Health Advocacy

FW health funders, advocates and service providers need to:

- Go beyond generalities about the correlation between poverty and health, explain to doubters that social environment has scientifically-recognized impacts
- Build awareness of stress as a key factor in negative psychological and physiological processes affecting health, and deploy this understanding to develop logic models for program design/interventions.
- Appreciate the implications of epigenetic and psychological processes through which social environment affects not just farmworker parents but, also, their children. Explain that the stakes are higher than recognized, the return on investment from well-designed interventions are dramatic.
- Become less siloed, better-prepared to look holistically at the interplay of multiple social factors in FW's lives—e.g. uncertain availability of work, hierarchical workplace, sub-standard housing, uncertain transportation, unauthorized legal status, limited-English, marginal literacy, cultural hostility, flawed institutions—affect individuals and families' lives

Specific messaging and strategic directions

- Pivot from an advocacy focus on physically toxic environment (e.g. pesticides, contaminated water) toward emphasizing the health consequences of a “socially toxic” environment
- Affirm the validity of farmworkers’ concerns about “mental health” (e.g. depression, anxiety or other conditions stemming from chronic psychological and physical stress)
- Work hard to design and secure funding for interventions to decrease chronic stress and help FW’s confront the constant challenges they face in juggling work and life in a sometimes hostile social context
- Pivot from “educating” farmworkers by solely emphasizing standard health-related topics toward a focus on practical problem-solving, navigating adversity, and collaborative action to improve socioeconomic environment.
- Affirm the validity of social networks’ role in mitigating stress and support maintenance of traditional cultural resources—i.e. the “cultura cura” approach
- Address problems such as workplace stress from sexual harassment as part of overall systemic changes in labor relations (e.g. the CIW code of conduct)

Implications for Farmworker Health Research

- Expand the research and regulatory boundaries of “industrial hygiene” and “occupational health” to extend beyond the physical workplace at the entire social and economic context of farmworker life
- Seriously examine stress as a constant pressure in the lives of farmworkers and their children and detail its’ likely consequences.
- Give special attention to the interplay of stressors in the lives of vulnerable sub-populations: women, indigenous immigrants, solo male migrants
- Investigate how networks can insulate some of the negative effects of stress; and how interventions can make use of these dynamics
- Design, implement, document, evaluate pilot programs to mobilize social capital as a resource to ameliorate stressors in farmworkers’ lives

Bibliography

- A partial bibliography of the research referenced in this presentation is available from Farmworker Justice or Ed Kissam (edkissam@me.com)

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