Published in final edited form as:

Am J Prev Med. 2007 June ; 32(6S): S177–S181.

Individual Action and Community Context: The Health Intervention Project

Claire E. Sterk, PhD¹, Kirk W. Elifson², and Katherine P. Theall^{1,3}

¹ Rollins School of Public Health, Emory University, Atlanta, Georgia

² Department of Sociology, Georgia State University, Atlanta, Georgia

³ School of Medicine, Louisiana State University, New Orleans, Louisiana

Abstract

Background—HIV risk-reduction efforts have traditionally focused on the individual. The need for including the role of the social context and community addition is being recognized. Social capital provides social relationships and potential resources that may hinder or trigger risk or protective health behaviors, especially for individuals with limited economic means.

Methods—Sixty-five adult inner-city drug using women, who were included in a woman-focused HIV risk reduction intervention trial, participated in in-depth interviews in Atlanta, GA between 2002 and 2004. The interviews focused on the women's individual behavioral change during the six months since completion of the intervention as well as on the impact of community conditions. Topics discussed were sexual and drug use behaviors, social relationships, social capital, and community physical and social infrastructure. The data were analyzed using the constant comparison methods.

Results—The respondents indicated the poor physical and social infrastructure led to alienation and negatively impacted their behavioral change efforts. Social capital and social support mediated these negative influences. Drug related violence was an especially debilitating in their efforts to reduce HIV risk associated with crack cocaine or injection drug use and associated sexual behavior. Environmental conditions and opportunity structures played salient roles in the women's success.

Conclusions—Individual actions and community context must be considered simultaneously when facilitating and assessing behavioral interventions.

INTRODUCTION

The need for effective behavioral HIV risk reduction strategies remains as we have entered the third decade of the HIV/AIDS epidemic, including those that consider the social context and structural factors has been recognized.^{1,2} The influence of community conditions on individual health increasingly is studied,³⁻⁵ including social capital.⁶⁻¹⁰ To what extent social capital may serve as a risk or protective factor for health continues to be debated.⁴ The impact of community characteristics on health has been demonstrated with negative community conditions often resulting in impaired health.^{11,12,13,14} For instance, studies on life in disadvantaged communities revealed an increase in stress, anxiety, fear and depression¹⁵⁻¹⁷

Correspondence and reprint requests: Claire E. Sterk, PhD Emory University, Rollins School of Public Health 1518 Clifton Road NE, Atlanta, GA 30322. E-mail: csterk@sph.emory.edu

No financial conflict of interest was reported by the authors of this paper.

Publisher's Disclaimer: This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

and in physical health problems such as cardiovascular disease^{18,19} and cancer.²⁰ In addition to studying the impact of community conditions and social capital, socio-economic conditions should be considered.²¹⁻²³ The health of those with limited economic means is more impacted by the community context than the health of those of higher socio-economic standing.^{24 - 30} There is little doubt that social forces external to the individual shape quality of life, including health status.^{31,32}

The focus of this paper is on African American women who participated in the Health Intervention Project (HIP), a community-based, individually-focused HIV risk reduction intervention targeting African American female drug users. The relationship between the women's individual characteristics and behavioral change and community conditions will be explored.

METHODS

Setting, HIP and Risk Reduction

A detailed description of the HIP study design, data collection procedures, and main findings is available elsewhere.^{33 - 36} The overall sample consisted of 333 women, all of whom were African American and HIV negative and who lived in the study community. They all were drug users, with the majority of the women (n=263) being primarily crack users, followed by those who smoked crack and injected drugs (n=44) and those who identified as primarily injection drug users (n=26). In terms of the intervention conditions, 42% of the women participated in the standard intervention condition, with the remaining women participating in the motivation (28%) or the negotiation (30%) intervention condition. When comparing the women's sexual and drug use behaviors prior to enrolling into the HIP risk reduction intervention to those reported six months upon completion of the intervention, positive changes occurred in their drug use, sexual behaviors, and the sex-drug connection related activities.

Ethnographic Measures

In-depth interviews were conducted among a convenience sample of 65 women between 2002 and 2004. Based on comparisons in the longitudinal survey results, they reflected the larger sample. Topics covered included individual experiences and everyday life, processes surrounding change in sexual and drug use behaviors, the women's perceptions of the community's physical and social infrastructure, and the link between changes in their individual lives and the community context. The women's community perceptions were derived from open-ended questions as opposed to the quantitative assessments of social capital which often include direct probes for community safety, trust and connections among community members, and civic involvement.

Data management and analysis

The ethnographic data were analyzed using the constant comparison method. For this paper, those codes and themes relevant to the main topic of interest were included. For example, the theme "physical community infrastructure," included codes such as quality of buildings, streets, and sidewalks, and abandoned building. Inter-rater reliability was established by using multiple coders. The code list was evaluated and modified until saturation was reached.

RESULTS

The women's definition of a community included: (1) a geographical area or place where people live; (2) a group of people who share geographical space; (3) a group of people who share norms and values, and sometimes behaviors; (4) a group of people who interact with each other, including interactions ranging from superficial to purposeful; and (5) a group of people who

gather around an issue (e.g., neighborhood clean-up). For many women, discussions of the community concepts included references to “being part of something.” Their perceptions of the HIP community's physical and social infrastructure and social capital in the HIP community will be presented.

Perceptions of the Community's Physical Infrastructure

The women's perceptions of the physical infrastructure in the HIP community were negative. Many explained that the poor physical conditions also caused them to feel negatively about themselves and to eliminate any hope for a better future for themselves and the community. They complained about the lack of initiative and responsiveness on the part of city and other service providers. Nobody seemed to take responsibility for fixing the potholes in the streets, the sidewalks, the street lights, the abandoned buildings, and the weed-infested empty lots strewn with garbage. Consequently, some women said they reached the point of caring less or not caring at all. In the past few years, renovations of residential structures were initiated by absentee landlords who rented property to residents who were eligible for section 8 housing subsidies and who guaranteed the landlords regular rent payments at a relatively high rate. However, these landlords often took shortcuts in the renovations and they failed to maintain the property. When something required repair, they frequently blamed the renters for negligence and held them accountable for any expenses. On the surface, these absentee landlords enhanced the physical infrastructure of the community; however, they also displaced long-term residents. Those who remained often found themselves in financial debt.

A number of women pointed out that the physical infrastructure was not conducive to a healthy lifestyle. For example, most sidewalks were cracked and unsafe for walking, no parks were available, and playgrounds for young children were dominated by alienated youth who used the facility as a central location for petty crime. Moreover, many women complained that the air quality caused high rates of asthma and other pulmonary problems among adults as well as children. The sewer system was known to intermittently collapse and many water pipes show evidence of leakage, with both conditions contributing to “unsafe” water. The interior and exterior paint often was peeling off and several women had been told by health inspectors that the paint contained unhealthy levels of lead. Rodents and insects were impossible to eliminate.

Perceptions of the Community's Social Infrastructure

Many women stated that the HIP community social infrastructure also was weak. Among other things, they associated a positive social infrastructure with the presence of vibrant local business and state-of-the-art social and health services. However, in the HIP community, the main grocery store also served as a prominent drug dealing location. The women complained that local stores were expensive, not well-stocked, and dangerous due to criminal activity that took place inside or on the periphery. The owners often lived elsewhere and they contributed little to the community. They also noted that the social and health services tended to be located outside the community as were the nearest public schools.

On the other hand, a number of women emphasized that the social atmosphere in the HIP community was such that they could ask for help. One woman described how she could ultimately count on others:

This neighborhood always is written up as being dangerous but it is different when you live here. There's all kinds of peoples here in this neighborhood and we make it happen to get along. There is judgment and stuff, like about drug dealers and crack whores, but when it comes down to it, we all are people. We look out for each other but you have to live here to understand. You may be upset with someone but you also know that one day they may save your life.

Many women pointed out that positive aspects likely would be unnoticed by outsiders. Other women highlighted the tolerance among community members and the need to for reciprocity as survival strategies. Few women viewed the absence of community organizations, associations for specific groups such as youth or the elderly, organized sports, cultural institutions, and health and social services as problematic. Their daily struggle to deal with the deprivation and the prevalence of social problems overshadowed any desire for community gatherings and gathering places.

Many women had been raised in the neighborhood. They commented on the numerous changes in the community, often changes in a negative direction. A topic commonly raised was the change in the community on Sunday morning, often accompanied by cynical and bitter sidelines, when former residents who had been able to escape the underprivileged neighborhood would gather, driving expensive cars. The women no longer felt welcome in the church. For many women, being a long-term resident did not instill pride but rather it symbolized failure. Being unable to leave affected their individual as well as the community spirit.

Other changes in the community as recounted by the women included the increasing prevalence of drugs in the area and the associated rise of the underground economy, the disappearance of local employment opportunities, and the increasing absence of adult male role models in the community, often stemming from the high incarceration rates among men of color. When describing these changes, it was not uncommon for the women to express disappointment with themselves and their lives. However, their stories also showed anger with the structural, economic and social change in their community. Whereas some women mainly tended to blame themselves, others held the “world” in which they lived accountable.

The women also elaborated on the complexities of community connections. These could involve positive interactions; consider one of the older women who observed everything that took place on her street while talking with few of the by-passers. Negative interactions were commonly mentioned by women who bartered sex for crack. Overall, the quality of the community connections appeared more salient than the extent or size of these connections. Consider the experiences of the woman whose life is centered on her porch. She described feeling isolated and having trouble trusting the people around her. At the same time, she never was burglarized, despite the numerous break-ins in the area. She also was pleased that she always found a neighbor to help her with small chores in the house. Despite her limited social connections, those she has serve her well. On the other hand, one of the crack cocaine users described a much more extensive social network. However, she also recounted many incidents of being disrespected by neighbors who looked down on her and relatives who no longer allowed her to enter their homes. She characterized her relationships as fleeting and negative.

The crime and violence rates in the HIP community are among the highest in the city. The women's opinions about local safety ranged from extremely safe to non-existent. Several women explained that given the limited “wealth” in the community, burglaries and robberies were more “productive” in richer communities. That did not prevent, however, theft of items that easily could be sold at pawn shops such as televisions, music equipment, or clothing and jewelry.

Numerous women explained that violence in the community was much more threatening to them and their community, while differentiating drug-related from non-drug-related violence. Drug-related violence commonly involved deals “gone bad,” violence due to the effects of drugs, or the sexual abuse of women. Many believed that if drugs disappeared, fewer people would use and crime and violence would significantly decrease. However, they also noted that it would take much more to decrease domestic sexual, physical and emotional abuse. One of

the women's main concerns was the children's exposure to violence. Several mothers described never letting their young children out of their sight, requiring that they spend much of the day inside.

Individual actions and change

The individual actions and change discussed in this section include changes in crack cocaine use, injection drug use, and sexual behaviors. All three of these areas are essential to HIV risk reduction. In addition to describing the women's actions and change, the ways in which the women described these as impacting their social roles and relationships is included.

Several women gave up crack cocaine and they explained this often meant having to terminate most of their social connections and drastic changes in their daily life structure. Some women described totally isolating themselves in the neighborhood; others mentioned establishing social connections with community members who were not using drugs. These persons frequently were said to provide positive reinforcement and social support. Support was also sought by the women through joining a twelve-step program and having a sponsor with whom to work. When comparing the women's strategies, those who isolated themselves were much less confident that they would be able to avoid crack cocaine than their peers who sought support and who made non-users more central in their social network.

Other women reported that they were unable to cease using crack cocaine, but they were using less. Their narratives describe patterns that place them between those women who were able to stop using through isolation and those who expanded their social connections. By reducing their crack cocaine use they were able to build social ties with others whose lives did not center on crack cocaine. They seemed to manage a marginal involvement in the mainstream and the drug world. Some women pointed out that this situation almost seemed easier than either having their role as crack cocaine users dominate or becoming ex crack cocaine users. Other women reported, despite their continued use, they no longer were using in public settings. This resulted in being less stigmatized by others in the community and being less vulnerable to street crime.

None of the women who injected drugs were able to cease this form of drug use. However, many were able to significantly reduce their HIV risk associated with injection drug use. A powerful strategy involved getting high with fewer people in a safer setting and in an environment where the norms did not endorse the sharing of syringes and other drug paraphernalia. Whereas these changes were important to their HIV risk reduction, the nature of the modification did not markedly impact their social roles and ties or other community connections.

For all women, a reduction in the number of sex partners involved fewer contacts with men who paid for a sexual encounter. Whereas the women cut down their involvement with partners who "paid" with drugs, they were less likely to reduce the number of partners who gave them money for sex. The women explained that they needed the money to provide basic needs for themselves and their children. Interestingly, those men who paid with money seldom lived in the neighborhood. Hence, the women tended to view them as outsiders who brought financial resources into the community.

Social capital in the HIP community

The social glue that binds the HIP community was described by the women as negative and "poison." They expressed frustration with the fact that they were unable to either improve the physical and social conditions in the community or to move elsewhere. The women's accounts show increasing levels of frustration as they are able to make more positive changes in their own lives. Other women emphasized the limited options available to them, often referring to

the various social roles they occupy: they are mothers among mothers, drug users among drug users, and poor women in an inner-city community with very limited resources among women facing similar conditions and little possibility to escape.

Whereas the women perceived little or no control over the physical infrastructure in the HIP community, they were more optimistic about the social infrastructure. For example, several women described that shifting their relationships and daily lives away from drug use allowed them more positive connections with women who followed the same exit route. Whereas the personal struggle to give up or reduce their drug use was difficult, knowing others who were similarly situated provided hope. Other women limited themselves to behavioral changes that did not shift their community status and again others engaged in changes that alienated them from the community. The women's stories demonstrate that social capital is not merely an isolated social construct but only can be understood when also placed into the context of individual experiences.

CONCLUSION

Although social cohesion, community context, and social capital are important theoretical concepts, their impact on individual actions has been inadequately studied. Public health research on social capital often highlights the community-level dimensions while ignoring individuals; social epidemiologists often favor aggregate data resulting in a "regression to the mean," while ignoring individual outliers. The findings of this paper contribute to the ongoing debates on community context and health and the link between individual actions and environmental cues. The women's accounts show that their individual HIV risk-reduction is associated with individual characteristics, community norms, opportunity structures, and environmental conditions. However, knowledge is limited regarding the effect size, the ways in which efforts at the individual and the community level emerge, and strategies to employ this information in such a way that it improves the public's health.⁴ The findings provide important suggestions for social and health service providers, urban developers, and policy makers. The findings also provide useful direction for future research would be the inclusion of data collection from a larger cross-section of residents, and not, like in this case, only the HIP women.

Like most research, this study has its limitations. The community context and social capital assessments largely were derived qualitatively and future research should include a mixed-method approach. Social epidemiologists increasingly understand the importance of using complex and multi-level statistical techniques when studying community effects.^{18,37,38} However, they need to be aware of independent effects. No matter how sophisticated, statistical analysis is unable to explain all processes and dynamics surrounding the link between individual health and community context.³⁴

The study has theoretical and practical implications for research on individual health and the community context. One such implication concerns the importance of recognizing the complexities of measuring social context and the need to link social capital to socio-economic conditions. Overall, the study shows that individual actions and community context need to be studied congruently, thereby allowing a focus on individual agency as well as collective efficacy.

ACKNOWLEDGEMENTS

This research was supported by grants from the National Institute on Drug Abuse (RO1DA10642 and RO1DA09819) and the Emory Center for AIDS Research. The views presented are those of the authors.

REFERENCES

1. Ehrhardt AA, Exner TM. Prevention of sexual risk behavior for HIV infection with women. *AIDS* 2000;14:S53–S58. [PubMed: 11061642]
2. Stern CE, Elifson KW, Theall K. Effectiveness of an HIV risk reduction intervention for African American women who use crack cocaine. *AIDS Education & Prevention* 2003;15:15–32. [PubMed: 12627741]
3. Diez-Roux AV. Bringing context back into epidemiology: Variables and fallacies in multilevel analysis. *American Journal of Public Health* 1998;88:216–222. [PubMed: 9491010]
4. Oakes J. The (mis)estimation of neighborhood effects: Causal inference for a practicable social epidemiology. *Social Science & Medicine* 2004;58:1929–1952. [PubMed: 15020009]
5. Pickett KE, Pearl M. Multilevel analyses of neighbourhood socioeconomic context and health outcomes: A critical review. *Journal of Epidemiology and Community Health* 2001;55:111–122. [PubMed: 11154250]
6. Baum F, Ziersch A. A glossary of social capital. *Journal of Epidemiology and Community Health* 2003;57:320–323. [PubMed: 12700212]
7. Hawe P, Shiell A. Social capital and health promotion: A review. *Social Science & Medicine* 2000;51:871–885. [PubMed: 10972431]
8. Bourdieu, P. The forms of capital. In: Richardson, JG., editor. *The handbook of theory and research for the sociology of education*. Greenwood Press; New York: 1986. p. 241–258.
9. Putnam RD. Bowling alone: American's declining social capital. *Journal of Democracy* 1995;6:65–78.
10. Coleman JS. Social capital in the creation of human capital. *American Journal of Sociology* 1988;94:S95–S121.
11. Berkman LF, Syme SL. Social networks, host resistance and mortality: A nine year follow-up study of Alameda county residents. *American Journal of Epidemiology* 1979;109:186–204. [PubMed: 425958]
12. Campbell, C.; Wood, R. *Social capital and health*. Health Education Authority; London: 1999.
13. Kawachi I, Kennedy B, Glass R. Social capital and self-rated health: A contextual analysis. *American Journal of Public Health* 1999;89(8):1187–1193. [PubMed: 10432904]
14. Subramanian SV, Kawachi I, Kennedy BP. Does the state you live in make a difference? Multilevel analysis of self-rated health in the US. *Social Science & Medicine* 2001;53:9–19. [PubMed: 11380164]
15. Latkin CA, Curry AD. Stressful neighborhoods and depression: A prospective study of the impact of neighborhood disorder. *Journal of Health Social Behavior* 2003;44(1):34–44.
16. Pearlin LI. The sociological study of stress. *Journal of Health and Social Behavior* 1989;30:241–256. [PubMed: 2674272]
17. Steptoe A, Feldman P. Neighborhood problems as sources of chronic stress: Development of a measure of neighborhood problems, and association with socioeconomic status and health. *Annals of Behavioral Medicine* 23(3):177–185.001
18. Berkman LF. The role of social relations in health promotion. *Psychosomatic Medicine* 1995;57:245–254. [PubMed: 7652125]
19. House JS, Landis KR, Umberson D. Social relationships and health. *Science* 1988;241:540–545. [PubMed: 3399889]
20. Helgeson, VS.; Cohen, S.; Fritz, HL. Social ties and the onset and progression of cancer. In: Holland, J., editor. *Textbook of Psycho-oncology*. 1998.
21. Kushner HI, Stern CE. The limits of social capital: Durkheim, suicide, and social cohesion. *American Journal of Public Health* 2005;95:1139–1143. [PubMed: 15933234]
22. Lynch JW, Davey Smith G, Kaplan GA, House JS. Income inequality and mortality: Importance to health of individual income, psychosocial environment or material condition. *British Medical Journal* 2000;320:1200–1204. [PubMed: 10784551]
23. Macintyre S, Ellaway A, Cummins S. Place effects on health: How can we conceptualise, operationalise, and measure them? *Social Science & Medicine* 2002;55:125–139. [PubMed: 12137182]

24. Duncan C, Jones K, Moon G. Context, comparison, and heterogeneity: Using multilevel models in health research. *Social Science & Medicine* 1998;46(1):97–117. [PubMed: 9464672]
25. Wilson, WJ. *The truly disadvantaged: The inner city, the under-class, and the public policy*. University of Chicago Press; Chicago: 1987.
26. Cohen D, Spear S, Scribner R, Kissinger P, Mason K, Wildgen J. “Broken windows” and the risk of gonorrhea. *American Journal of Public Health* 2000;90:230–236. [PubMed: 10667184]
27. Galea S, Ahern J, Vlahov D. Contextual determinants of drug use risk behavior: A theoretic framework. *Journal of Urban Health* 2003;80:iii50–iii58. [PubMed: 14713671]
28. Diez-Roux AV. Investigating neighborhood and area effects on health. *American Journal of Public Health* 2001;91(11):1783–9. [PubMed: 11684601]
29. Galea S, Vlahov D. Urban Health: Evidence, Challenges, and Directions. *Annual Review of Public Health* 2005;26:341–365.
30. Sampson R, Raudenbusch S, Earls F. Neighborhoods and crime: A Multilevel study of collective efficacy. *Science* 1997;277:918–924. [PubMed: 9252316]
31. Wilson W. Race, class and urban poverty: A rejoinder. *Ethnic and Racial Studies* 2003;26(6):1096–1114.
32. Roberts SA. Community-level socioeconomic effects on adult health. *Journal of Health & Social Behavior* 1998;39:18–37. [PubMed: 9575702]
33. Serk C, Theall K, Elifson K. Effectiveness of a risk reduction Intervention among African American women who use crack cocaine. *AIDS Education And Prevention* 2003;15(1):15–32. [PubMed: 12627741]2003
34. Serk CE, Theall KP, Elifson KW, Kidder D. HIV risk-reduction among African American women who inject drugs: A randomized controlled trial. *AIDS and Behavior* 2003;7:73–86. [PubMed: 14534392]
35. Serk CE, Theall K, Elifson K. Who's getting the message? Intervention response rates among women who inject drugs and/or smoke crack cocaine. *Preventive Medicine* 2003;37:119–128. [PubMed: 12855211]
36. Theall K, Elifson K, Serk C. Past and new victimization experiences among African American female drug users who participated in an HIV risk reduction intervention. *Journal of Sex Research* 2004;41(4):400–407. [PubMed: 15765280]2004
37. Yen IH, Syme SL. The social environment and health: A discussion of the epidemiologic literature. *Annual Review of Public Health* 1999;20:287–308.
38. Krieger N. Theories for social epidemiology in the 21st century: An ecosocial perspective. *International Journal of Epidemiology* 2001;30:668–677. [PubMed: 11511581]