A DOSE OF DRUGS, A TOUCH OF VIOLENCE, A CASE OF AIDS: CONCEPTUALIZING THE SAVA SYNDEMIC

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ABSTRACT

Gang violence, substance abuse and AIDS have been described as parallel epidemics in the U.S. inner city. This paper draws upon findings from a set of ethnographic and survey research projects in the Puerto Rican community of Hartford, CT to develop a conceptualization of the close interconnections between these three health and social problems. Rather than separate conditions, substance abuse, violence, and AIDS, referred to here as SAVA to stress the relationships among these three phenomena, are best thought of forming a single syndemic (a closely interrelated complex of health and social crises) that continues to take a significant toll on the lives and well-being of the urban poor.

INTRODUCTION

Gang-related and other violence, substance abuse, and AIDS have been described as concurrent epidemics among U.S. inner-city populations. The term epidemic, however, does not adequately describe the contemporary inner-city health crisis, which is characterized by a set of closely interrelated, endemic and epidemic conditions (e.g., HIV, TB, STDs, hepatitis, cirrhosis, infant mortality, drug abuse, suicide, homicide, etc.), all of which are strongly influenced and sustained by a broader set of political-economic and social factors, including high rates of unemployment, poverty, homelessness and residential overcrowding, substandard nutrition, infrastructural deterioration and loss of quality housing stock, forced geographic mobility, family breakup and disruption of social support networks, health care inequality, and youth gang activities (Bourgois 1995; Wallace 1990; Waterston 1993). Elsewhere (Singer 1994, 1995) I proposed the term "syndemic" to refer to the interrelated complex of health and social crises facing the urban poor. Like the terms epidemic and pandemic (spreading health problems of local or extra-local distribution), the suffix of syndemic is derived from the Greek word demos (the people), while the prefix is taken from the Greek term for "working together." In other words, a syndemic is a set of closely intertwined and mutual enhancing health problems that significantly affect the overall health status of a population within the context of a perpetuating configuration of noxious social conditions. Substance abuse, violence, and AIDS, in this sense, are not merely concurrent, in that they are not wholly separable phenomena. Rather, these three closely linked and interdependent threats to health and well being, referred to here by the single term SAVA (substance abuse, violence, and AIDS) to emphasize their interrelatedness, constitute a major syndemic that already has taken a devastating toll on the lives of the urban poor and threatens to wreck further pain and havoc in the future.

While some dimensions of the relationship among the three conditions under examination in this paper have been studied, at least preliminarily, and are beginning to be understood (e.g., the roles of direct and indirect sharing of drug injection equipment in the spread of AIDS; the role of crack-cocaine in sex for drugs/money transactions in AIDS transmission; the role of drug dealing in turf-war violence; the role of an AIDS diagnosis in enhancing levels of drug use), other suspected connections are unclear (e.g., the frequency of violence against women among condom-resistant men; the role of victimization in the initiation and continuation of drug use as a form of self-medication; the impact of structural violence on AIDS risk behavior; differences in level of withdrawal agitation and subsequent violence associated with alternative routes of cocaine consumption). Thus, in Figure 1, although there are significant knowledge gaps in all of the relationships displayed, relationship #1 is better understood than relationship #2, which, in turn, is better understood than relationship #3; while a holistic understanding of all three conditions in tandem is significantly underdeveloped.

On the basis of ongoing research and intervention targeting drug use, AIDS risk, and violence in the Puerto Rican community of Hartford, CT (Singer, Jia, Schensul, Weeks, Page 1992; Singer, Jia 1993; Weeks, Singer,
Grier, Schensul 1996) and a review of relevant literature on the relationships between these increasing dominant features of inner city life, the purpose of this paper is to contribute to the conceptualization of SAVA as a growing inner city syndemic.

**SAVA: THE INTWINEMENT OF SUBSTANCE ABUSE, VIOLENCE AND AIDS**

Since 1988 our applied anthropological and epidemiological research team has been studying street drug use and AIDS risk among adolescent and adult injection and non-injection drug users in Hartford, CT (Singer 1993). While violence was not a core variable in our initial research design, the frequency of violence and its painful impact on the lives of our study participants has become increasingly apparent. In life history interviews, study participants describe jarring tales of violence and suffering. For example, Maria, a young Puerto Rican woman, reported that when she was 12 years old her father brutally beat her with a pool stick because she refused his frequent demands for sexual services. Carmen, a home-les mother of two small children, reported being tightly tied to a sofa for several weeks by a man who had offered her a place to live. Another of our participants reported that he had his cheek bone smashed by a drug dealer who claimed he had not fully paid his drug bill. In Project COPE, a NIDA-funded study of AIDS risk and prevention among out-of-treatment street drug users (Weeks et al 1996), we found that 4 percent of our participants died between intake and 6-month follow-up primarily as a result of violence (2 were murdered), car accidents, or disease. In light of its significant toll on the lives of the participants in our studies, we have come to see that violence, in its many forms, must be a central focus of preventive research on drug use and AIDS.

Indeed, violence has become a common feature of contemporary urban experience, and our society often is said to be caught in a cycle of intergenerational transmission of violence that produces ever more violent generations over time. Thus, in 1951, New York City had 244 murders; in 1990, the city recorded 2,245 murders (although the rate fell to 1,561 in 1994). The problem of violence is not limited to the country’s largest cities however. In 1960, New Haven, CT, a moderate-sized city comparable to Hartford, had six murders, four rapes, and sixteen robberies. Thirty years later, despite a 14 percent drop in the size of its population, the city reported thirty-one murders, 168 rapes, and 1,784 robberies (Walinsky 1995). Currently, the US homicide rate is between 4 and 70 times that of other countries and for every homicide there are about 100 nonfatal intentional injuries (Sullivan 1991; US Department of Justice 1988). Further, it is estimated that 22 million women are victims of rape or sexual assault during their lifetime. The Department of Justice estimates that eighty-three percent of Americans will be victims of violent crime at least once in their lives, while 2.2 million people are intentionally injured by another person each year (US Public Health Service 1990). In the inner city, and among active street drug users, the frequency of violent victimization is far higher and street gangs contribute significantly to this pattern.

Relatively few studies focus directly on the drugs/violence relationship. Goldstein (1985) has suggested three possible connections. First, the chemical effects of some drugs may lead to violent behavior. Second, drug addiction may lead to "fund-raising" crimes that include violence. Finally, drug dealing may promote the use of violence to secure or defend markets or exact payment from drug customers.

Existing research indicates that in each of these cases the relationship between drug/alcohol use and violence is complex and conditioned by various additional factors including the substance(s) that is/are consumed and the method of consumption. Several drugs (or drug combinations) have been linked to increased aggression and resulting violence, including marijuana, alcohol, heroin, cocaine, PCP, and amphetamines (Simonds, Kashani 1980). Although marijuana is commonly thought of as a suppressor of hostility, it has been linked by several studies to heightened irritability and violence (Spunt, Goldstein, Bellucci, Miller 1990a, 1990b) under certain conditions. Spunt, Goldstein, Brownstein, and Fendrich (1994) examined marijuana use among 268 individuals incarcerated for homicide and found that one third of their respondents used the drug on the day of the homicide and a quarter of these individuals reported that marijuana was a factor in their crime. Most of these individuals (80%) were also under the influence of alcohol at the time of the homicide.

Alcohol has been linked to various forms of violence, including homicide, assault, spouse abuse, rape, and child abuse. Indeed, alcohol has been associated with the most violent
expressions of aggression (Gayford 1975; Ger­
son, Preston 1979; Kelleher, Chaffin, Hollen­
berg, Fischer 1994; Valdez, Kaplan, Curtis, 
Yin 1995). Statistically, alcohol is associated 
with violent crime at a significantly higher level 
than it is with non-violent crime (Murdoch, 
Pihl, Ross 1990). Consistently, reviews of the 
laboratory and retrospective behavioral litera­
tures have concluded that alcohol facilitates or 
increases aggression, perhaps through disin­
hibition (Hull, Bond 1986, Taylor, Leonard 
1983), although the disinhibition theory has 
been disputed (Collins 1988). Various studies 
also note that inmates report high levels of 
alcohol consumption prior to arrest. While 
some studies emphasize the issue of psycho­
logical expectation, especially prior learning 
(MacAndrew, Edgerton 1969) or the combined 
effects of situational factors, Bushman and 
Cooper (1990) argue that the pharmacological 
effects of alcohol, in and of themselves, may 
be an important determinant of aggression. 
While the link between drinking and aggres­
sion/violence has been found in numerous 
studies, as Collins and Schlenger (1988) ar­
gue, in the absence of an understanding of the 
extact nature of this association this often repli­
cated finding is uninteresting and of little use 
theoretically or from policy or prevention per­
spectives. Existing research findings prohibit 
establishment of a causal connection; often 
studies are done retrospectively with impris­
oned populations.

Several studies have found an asso­
ciation between cocaine use and violence, 
although method of consumption among re­
spondents varies across research projects. 
Siegal (1982) linked violence and anti-social 
behavior to free-base cocaine. A larger study 
by Miller, Gold, and Mahler (1990) of men who 
called a cocaine hotline found that 32 percent 
had a history of violence not associated with 
crime and 46 percent had a history of violent 
crime. The National Household Survey on 
Drug Abuse, a telephone study by NIDA (1985), 
found that 83 percent of cocaine users re­
ported paranoia as a side effect and 9 percent 
reported attempted suicide. Giannini et al. 
(1993) found higher levels of violence among 
those who free base and inject cocaine than 
those who use nasal insufflation. Crack-co­
caine, in particular, has been found to be 
associated with the perpetration of violent 
crime, especially felonious assault and homi­
cide (Goldstein, Paul, Bellucci, Patricia, Spunt, 
Miller 1991). Johnson, Boster, and Holbert 
(1989), in a detailed review of violence and 
hard-drug sales in the inner city, explain the 
rise of violence associated with crack in terms 
of the social organization, rivalry, and citizen ­intimidation strategies of crack-selling gangs. 
Inciardi and co-workers (1993) also found a 
correlation between level of violence and level 
of involvement in crack-cocaine sales & use. 
Although there were early attempts to 
suggest that heroin users tended to avoid vio­
ence because the drug inhibited aggression, 
opiates have been linked to violence in more 
recent studies, especially for some subgroups 
(Inciardi 1972). Crime, however, rather than 
violence per se, has been the focus of much of 
the research on the social consequences of 
heroin addiction. An examination of the types 
of crimes committed by heroin addicts sug­
gests that acts of violence are not uncommon. 
In his study of 573 Miami heroin users, Inciardi 
(1986) found that during a one year period, 
participants collectively committed 5,300 
robberies (mostly at gun point) and 639 as­
saults, as well as an assortment of other 
crimes including arson, vandalism, and extor­
tion. Goldstein (1979) linked violence among 
heroin-using prostitutes to the impatience and 
irritability associated with withdrawal. In their 
ethnographic study of heroin injectors in a 
number of Eastern cities, Hanson, Beschner, 
Walters, and Bovelle (1985) found that only 10 
percent regularly engaged in violent crime, 
primarily to raise money to support their habit. 
However, patterns have been changing. 
Stephens and Ellis (1975) noted that begin­
in the 1970s crimes among heroin users 
were becoming increasingly more violent, a 
trend also found by McBride (1981) in Miami. 
In his re-study of an East Harlem sample of 
heroin users, Preble (1980) found that 40 
percent had been murdered since his original 
study 15 years earlier. Hammersley, Forsyth, 
Morrison, and Davies (1989) found that heavy 
opiate users committed crimes significantly 
more frequently than did moderate users, 
marijuana users, or alcohol users. They con­
cluded that the need for opiates does not lead 
directly to crime, but rather that crime and 
opacity use tend to influence each other. 
Other drugs, alone and in combination, 
also have been implicated in violent behavior. 
However, none of these other drugs (e.g., 
PCP, amphetamines) currently is consumed 
in any significant quantities by street drug 
users in the Hartford area. Rather, street drug 
users in Hartford appear to fall primarily into
Table I: Sociodemographic Comparison in a Mixed Hartford Neighborhood

<table>
<thead>
<tr>
<th></th>
<th>Hispanic (n=117)</th>
<th>African American (n=100)</th>
<th>White (n=73)</th>
<th>F</th>
<th>X Squared</th>
<th>p&lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average age</td>
<td>30.5</td>
<td>30.3</td>
<td>33.6</td>
<td>4.31</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Average monthly household income</td>
<td>$999</td>
<td>$1233</td>
<td>$1812</td>
<td>49.9</td>
<td>.0001</td>
<td></td>
</tr>
<tr>
<td>Average number of people in household</td>
<td>2.9</td>
<td>2.4</td>
<td>2.2</td>
<td>5.47</td>
<td>.005</td>
<td></td>
</tr>
<tr>
<td>Average per capita monthly income</td>
<td>$426</td>
<td>$712</td>
<td>$1096</td>
<td>40.7</td>
<td>.0001</td>
<td></td>
</tr>
<tr>
<td>Average years of education</td>
<td>10.6</td>
<td>12.6</td>
<td>14.3</td>
<td>8.2</td>
<td>.0001</td>
<td></td>
</tr>
<tr>
<td>Percent of high school graduates</td>
<td>41%</td>
<td>84%</td>
<td>86%</td>
<td>61.3</td>
<td>.00001</td>
<td></td>
</tr>
<tr>
<td>Percent college graduates</td>
<td>3%</td>
<td>13%</td>
<td>53%</td>
<td>79.2</td>
<td>.00001</td>
<td></td>
</tr>
</tbody>
</table>

one of three groups: polydrug injectors (primarily speedball or heroin), free-base cocaine smokers, and rock-cocaine smokers (crack). All of these groups also use alcohol and marijuana. Overall, numerous studies provide support for arguing that the relationship between drug use and violence is strong (Brownstein, Spunt, Langley 1995). However, much of the existing literature is handicapped by the fact that it relies on data derived from official sources, including medical examiner reports and arrest records; the former only provide information on victims and the latter only include violence or drug use during the commission of a crime (Spunt et al 1990a).

The full role of violence in AIDS transmission also is not well understood nor has it been well studied. Several types of violence have been linked to AIDS however. Violence has been directed at people with AIDS, both as an expression of fear/prejudice and as an extension of violent homophobic attitudes. Moreover, it is widely recognized that rape and sexual abuse are potential routes of viral transmission. There are approximately 100,000 reported cases of rape of women and an estimated 200,000-500,000 cases of sexual assault against female children each year (Richardson 1988). In 1991, 45 percent of the women who were raped in the U.S. believed their assailants were under the influence of drugs or alcohol (Collins, Rosenbaum 1994). There also are reports in the literature of women drug users who have been beaten and/or raped (sometimes multiple times) by drug dealers (Inciardi 1986; Maher, Curtis 1993) & of women drug sellers who frequently are subject to violence victimization leading to compensatory drug use & HIV risk (Fagan 1994). Rape of men (primarily in prison) and sexual abuse of boys are additional expressions of the potential link between violence and AIDS. In a study of adolescents, both male and female, comparing victims of sexual abuse with those who did not report abuse, Harrison, Hoffman and Edward (1989) found that victims used a wider variety of drugs and were more likely to use drugs to medicate distress than nonvictims. Thus, both male & female victims were significantly more likely than nonvictims to report being both nervous & having trouble sleeping as well as using drugs to reduce their tension and sleeplessness, while significantly more female victims than nonvictims reported using drugs to escape family problems. As this study suggests, self-medication with illicit drugs & alcohol as a means of coping with the emotional costs of violence victimization (e.g. common reports of emotional numbing) may be an important factor that puts people at risk for AIDS. This association may be facilitated by the fact that individuals who are subjected to repeated violence victimization exhibit heightened levels of self-degradation (Dembo, Washburn, Berry, Dertke, Wish, Williams, Schemideier 1988; Dembo, Williams, La Voie, Berry 1989) and "inadequate mechanisms for self-protection" (Harrison et al 1989). Thus, drug use has been found to be associated with higher rates of unsafe behavior (Kingery, Pruitt, Hurley 1992).

The association between violence and AIDS may have other expressions as well. Various researchers have noted that encouraging women to use condoms as part of AIDS prevention may subject them to threats and violence from resistant partners (Singer, Flores, Davison, Burke, Castillo, Scalon, Rivera 1990). A woman who promotes condom use in a relationship may be seen as accusing her male partner of having other sexual partners or implying that she has had other partners; this has been found to be a factor in condom avoidance among Latina women in California for example (Amaro 1995; Gomez, Marin 1993). As we have found in several of our
prevention projects in Hartford, some Hispanic men voice threats even with regard to their partners participation in AIDS education (Singer, Gonzalez, Vega, Centeno, Davison 1994). Goldstein (reported in Inciardi 1986) notes that fear of AIDS has led to violence in cases where a drug injector discovered that another injector has used his/her "works" in a shooting gallery or when buyers discover that someone is selling used syringes on the street. However, the literature on violence and AIDS, while suggestive, remains fairly slim, although recent grant announcements by NIDA encouraging research on this topic will change this pattern.

As this review of the literature, which provides the context for a discussion of findings from the Puerto Rican community of Hartford below, suggests, SAVA is a complex of synergistically related conditions, not merely an assortment of independent threats to health & well being. A full understanding of the problems of inner-city life, therefore, demands that violence, drug use, & AIDS be studied together as pieces of a larger, more complex pattern.

THE PUERTO RICAN COMMUNITY OF HARTFORD, CT: A COMMUNITY IN CRISIS

Crisis is a term that well describes daily experience for a large percentage of 40,000 Puerto Ricans who have migrated to Hartford over the last 35 years. As contrasted with its popular images as a New England Yankee settlement or a bastion of insurance industry wealth, Hartford is the 4th poorest moderate-sized city in the country. Hartford also has the 4th highest per capita crime rate in the nation, with drug-related activity accounting for 80 percent of all city crimes (Backstrand, Schensul 1982). The city has an ethnic composition that is roughly 45 percent African American, 30 percent Hispanic (over 75% of whom are Puerto Rican), and 25 percent White (Hartford Public Schools 1990). Over 25 percent of households in the city have incomes below the poverty level and over 30 percent are on welfare. Fifty percent of high school students live in single-parent households. These conditions are especially evident in the Puerto Rican community, as seen in several of our community studies. In 1988, a door-to-door survey of all households on randomly selected blocks in an ethnically mixed neighborhood of Hartford found that only 42 percent of the Puerto Ricans in the sample had completed a high school education, and 17 percent had six or fewer years of schooling (AIDS Community Research Group 1988). Less than 70 percent of these individuals had full- or part-time employment. Forty-two percent reported household income from some form of public assistance. The average monthly income was $999. A comparison of key socioeconomic findings from this study is shown in Table 1. These data reveal clear differences in the household size, household income, per capita income, and educational level across the three ethnic sub-samples. Taken together with data on employment status and receipt of public assistance from this study, we concluded that Whites in the sample on average have a higher socioeconomic level than the African Americans and Puerto Ricans, and the Puerto Rican subsample is consistently ranked lowest in socioeconomic status, despite residence in the same neighborhood.

This conclusion is supported by findings from our study of drinking patterns of Puerto Rican men (Singer, Baer 1995). This study examined socio-demographic characteristics and alcohol consumption behavior in 398 men, age 18-48, randomly selected from inner city rental apartments, housing projects, and rented single family homes. Among these men, 59 percent had less than a high school education, 36 percent were unemployed, and 88 percent reported a household income of under $15,000 per year. Analysis of the data from this study showed that 40 percent of these men had consumed alcohol during the last week, 53 percent of the drinkers averaged 3 or more drinks per drinking occasion, and 23 percent have had 8 or more drinks 1-3 times a month in the last year. Also, 18 percent reported having difficulty controlling their alcohol consumption, 33 percent reported having experienced a problem drinking symptom, and 26 percent reported that their partner has threatened to leave them because of their drinking. In sum, a random sample of Puerto Rican men in Hartford showed high levels of unemployment and high rates of alcohol-related problems, and, as expressed in partners' threats to leave, significant family effects of problem drinking.

These findings indicate the difficult circumstances and considerable disruption experienced by Puerto Rican families in Hartford. Other studies by members of our research team show that many Hispanic families are headed by women (48%), 97 percent of whom are on public assistance and have, on average, three children to support (De La
Data from a study on reproductive health among Puerto Rican women in Hartford indicate these women suffer high rates of physical and psychological abuse by husbands/partners, childhood physical and sexual abuse, substance abuse, substance abuse related family problems, housing problems, depression, and low self-esteem (Singer et al 1990). Women with the most difficulties, highest rates of depression, and lowest self-esteem are married; those with least difficulties are either single or have live-in mar­inovios. The systematic marginalization of Puerto Rican men through chronic poverty, unemployment, and discrimination has contributed to the abysmal condition of Puerto Rican women, and played an increasingly important role in family instability, crisis, and dysfunction. Migration, alienation, linguistic/cultural barriers, and the rupture of support systems have exacerbated this situation.

Other stresses also impacted the Puerto Rican family. Our ethnographic studies have documented that many Puerto Rican families in Hartford live in overcrowded and deteriorating apartments that are exorbitantly priced leaving few resources for food, health care, and other family needs. High levels of tension due to poverty, cramped space, language barriers, lack of familiarity with the surrounding environment, and limited culture-appropriate social programs have left many families feeling powerless, depressed, and often angry. As a result, as noted in a Hartford Courant article entitled “Two Connecticut: Separate and Unequal,” “All too often, researchers say, the lesson learned by Black and Hispanic children is a lesson in self-hate”.

The health and social status of Puerto Rican children and adolescents in Hartford is indicated by the following factors: 1) the infant mortality rate among non-Whites in Hartford is 24.3 per 1,000 live births, more than triple the statewide average for White babies; 2) only 42 percent of Hispanic children (compared to 86% of white children) live with both parents; 3) almost 55 percent of Hispanic children (under 16) in Hartford are living below the federal poverty line; 4) only 42 percent of Hispanic children in public school perform above remedial standards (compared to 74% of white children); 5) among Hispanic adults, 62 percent have less than a high school education; 6). 32 percent of families on welfare in Connecticut are Hispanic (although they compose only 4% of the state’s population); 7) Hispanics account for 25 percent of clients at shelters for the homeless; 8) 24 percent of inmates in state prisons in the state are Hispanic; and 9) Hispanic families in Hartford are poorer than Hispanics nationally, with 25 percent earning less than $5,000 a year in 1980.

**ADOLESCENTS, Gangs and Risk in Hartford**

It is widely recognized that adolescence in our society is a period of turmoil, conflict, and change. Indeed, Margaret Mead’s famous study, *Coming of Age in Samoa*, published in 1928, was launched with the explicit intention of addressing two related questions: Are the “disturbances which vex our adolescents” (Mead 1928) the same in all societies of the world? Are these disturbances biological or social in nature? Mead concluded that many of the behaviors we attribute to the developmental stage of adolescence are unique to Western industrial society. Because of the way our society is organized more than because of inherent biological factors, adolescents face special problems with identifiable emotional and behavioral consequences.

Few adolescents believe that they will measure up to the demands of society; they lack an adult identity and often feel powerless. They are told that this is a critical period of preparation and not to be lived for its own sake, but they have a realistic and pervasive dread of the future. Testing and experimentation are an integral part of the young person’s search to discover himself and his society and to progress from the dependence of childhood to the independence of maturity. (Millman, Khuri 1981)

Risk-taking, sexual exploration, alcohol/drug experimentation have all become common features of adolescent response to the conflicts, demands, pressures, and self assertion needs experienced by many youth. While always hazardous, with the spread of AIDS, many of these behaviors have acquired a significant increase in their level of life-threatening risk. This may be especially true among inner-city Puerto Rican youth for several reasons.

First, Puerto Ricans are a young population. While 29 percent of the general U.S. population are below 20 years of age, for U.S. Puerto Ricans this age group comprises 41 percent of the population (Montgomery 1993). Adolescents comprise a shrinking proportion
of the total U.S. population, but among Puerto Ricans the reverse is true. Consequently, while Hispanics comprise about 30 percent of Hartford’s total population, they represent 51 percent of the school population (Gaffney, Mitchell 1995).

Secondly, not only are Puerto Rican adolescents commonly migrants or the children of migrants, they often experience a high level of geographic mobility within and between urban areas in the U.S. For example, in her study of 241 Puerto Rican households in two Hartford neighborhoods, Davison (1995) found a range between 0 and 11 moves over the past five years, with over half of the households reporting two or more moves during this period. Mobility is caused by a number of factors, including poor housing conditions, illness, inability to pay rent, urban renewal, and overcrowding. Cultural and geographic mobility has a disruptive effect on family structure and the maintenance of traditional values, leading to sharper intergenerational conflicts. It also may pressure Puerto Rican adolescents to prove themselves to new peer groups while blocking the development of a sense of self-confidence born of having enduring personal relations.

Thirdly, Puerto Rican youth have a significantly elevated school dropout rate, as high as 70 percent in some studies (Lucas 1971). A study of educational attainment in New York City found that 64 percent of Puerto Ricans over the age of 25 had not completed high school, compared to 34 percent of Whites & 41 percent of African Americans (cited in Rodriguez 1989). Reasons for dropping out include self-identity problems caused by discrimination, difficulty in relating to parents (and lack of high values of education in the home), and a progressive estrangement of the student from the school. (Dillard 1981)

For every ten Puerto Ricans and other Hispanics who complete high school, another ten drop out of school. Overall, Hispanics comprise about 18 percent of school dropouts but only 7 percent of high school graduates. Moreover, they often drop out fairly early, half do not complete the 9th grade (Duany, Pittman 1990). In Hartford, by the 1983-84 school year, Hispanics comprised 45 percent of high school dropouts, although they only represented 36 percent of the high school population. By the 1990-91 school year, Hispanics comprised 51 percent of high school dropouts. During this seven year period, the overall high school dropout rate in Hartford increased from 10 to 17 percent (Sequin, Rodriguez, Esangbedo, Maine 1995). The academic experience of Hispanic youth is further reflected in a report from the Educational Testing Service. In terms of average reading, mathematics, and science proficiency measured at ages 9, 13, and 17 years, Hispanic youth lag behind their white counterparts in all areas at all ages. The skills of 17-year-old Hispanics in these areas have been found to be comparable to those of 13-year-old White students (reported in Duany, Pittman 1990).

Fourthly, Puerto Rican youth often exhibit a high level of identity confusion. Writing of ‘Pedro Castro,’ a typical Puerto Rican youth who became involved in street gang life and drug use in Danbury, CT, Westfield notes:

Without a feeling of historical community — of having come from some place — Pedro Castro, like many Puerto Ricans of his generation in American urban society, found his identity stunted. ... Pedro stated, “I have grown up being embarrassed and ashamed to be a Spanish-speaking person” ... The oppression Pedro’s father faced left him with his identity and culture, and did not strip him of his native language or his Hispanic life style; his son’s experience is totally different. The oppression Pedro’s generation experienced is much greater because the alienation brought about by their ignorance of their history, language, and culture was much greater. The first generation could go back to their home (in thought and action), the second generation had no home, if only because it had no identity. (1981)

The shame expressed by this youth exemplifies a pattern of internalized oppression, a condition we have referred to as oppression illness, that appears to be common among U.S.-born Puerto Rican youth (Singer 1995). For this group, drugs help to fill the void. Thus, in their study of Puerto Rican 10-12th graders in New York, Velez and Ungemack (1989) found that youth born in the U.S. had significantly higher levels of drug use than similar age Island-born youth who had migrated to the U.S. The regular use of drugs by Puerto Rican youth to cope with internalized oppression and the daily direct and indirect experience of structural racism is carefully documented by Philippe Bourgois (1995) in his ethnographic study...
account of Puerto Rican crack dealers in New York City. Blocked in their genuine efforts to succeed in the alien White-dominated mainstream culture, Puerto Rican youth often retreat into the only available alternative, the drug-drenched oppositional street culture dominated by gangs.

Finally, large numbers of Puerto Ricans have been found in the ranks of homeless youth in the Northeast. For example, Rotheram-Borus, Koopman, and Bradley (1989) recruited a consecutive series of adolescents who sought shelter services in New York City. The ethnic distribution of recruited youth was 53 percent Hispanic, 26 percent African American, and 16 percent White. In a follow-up consecutive enrollment study (Rotheram-Borus, Meyer-Bahlburg, Rosario, Koopman, Haignere, Exner Matthieu, Henderson, Gruen 1993), 64 percent were African American, 28 percent Hispanic, and 8 percent White and Other. These adolescents reported having a large number of sex partners, avoidance of condoms, high frequencies of injection drug use, and frequent involvement in violence. In addition, most had dropped out or been expelled from school. Many were homeless because of the breakup of their family of origin. The case of Joselita (pseudonym), a participant in a Hispanic Health Council youth program, exemplifies the life experience of many of these homeless youth.

Joselita was the oldest of three girls born in Puerto Rico in the slums outside of San Juan. She came to Hartford when she was four. Her mother fled from San Juan because of Joselita’s father, who used to come home every Friday night from the factory drunk and “smelling like alcohol.” “He used to hit my mother so many times, hit her on her face where her beauty is.” Soon, Joselita’s mother met a man whom she fell in love with and they lived together. “My mother was happy, but she was afraid because we were so poor. He had a job... I never liked him though. When she went shopping he would come and look at me and touch me all over.” Eventually, Joselita couldn’t concentrate and “hated her life.” She wanted to leave school. She soon met a boy who made her “feel better,” and became pregnant at 16. She was afraid to tell her mother though and tried to hide her belly with baggy clothes. The shame this brought to Joselita’s mother for her young unmarried daughter to be pregnant caused Joselita to be “thrown” out of the house. “I can’t ever forget it, the way she yelled at me and shook me and threw my things out on the street. I had nowhere to go. And I was already 5 months pregnant.” “After living on the streets for three days she went to her sister’s who took her in, but became very depressed because her sister did drugs all the time. “She was a junkie, she had no hope of anything... I used to hate watching the way she acted, and how she treated my little nephew. She would wake up at 3 in the afternoon and feed him then. They had hardly anything to eat, and only ate once a day. And she took everything out on him, hitting him for the littlest thing.” She concluded, “I don’t know what I want to do really. I wouldn’t know where to start. But I just keep thinking, I got to have more in me than this. There’s got to be something better for me.” (Unpublished interview data, Hispanic Health Council.)

As a result of the conditions described above, many Puerto Rican adolescents in Hartford face severe life challenges with major threats to their health, sense of self-worth, and experience of social acceptance. It is within this context that many Puerto Rican youth join one or another of the street gangs whose beaded necklaces, wall graffiti, and penchant for retaliatory drive-by shootings have made them a painfully visible presence in Hartford’s central city Puerto Rican neighborhoods. Vigil (1988) has argued that gang affiliation is best understood within a multiple marginality framework, a condition that encompasses the consequences of barrio life, low socioeconomic status, street socialization and enculturation, and problematic development of self-identity.

Multiple marginalization combined with the appeal of supportive group membership, lack of many viable life alternatives, and the promise of great wealth and unconditional acceptance have made gangs highly attractive to many Puerto Rican youth. While there are no historic studies of the emergence of Puerto Rican gangs in Hartford, in Chicago, Glick’s research (1990) shows that Puerto Rican youth gangs date at least to the 1960s and were formed in response to attacks on Puerto Ricans by gangs of White youth. Building on encounters with Puerto Ricans from other states while incarcerated in prison, some Chicago gangs formed chapters outside of Illinois. For example, one of the largest Puerto Rican gangs in Hartford has Chicago roots. Interestingly, although still called the
Latin Kings, the Chicago branch of this group now has a multiethnic membership. A front page *New York Times* (Nieves 1994) article describes the contemporary gang scene in Hartford as follows:

Los Solidos, the Latin Kings, 20 Love, Netas—names unheard of in Hartford five years ago—are now household words. The police and prosecutors say the gangs are partly the reason for the city’s record murder rate, record police overtime costs and a surge in drug dealing.... "The gangs are the Mafia of the 90’s," said Christopher Morano, an assistant state’s attorney in charge of a statewide gang prosecution unit. The Latin Kings began as a Hispanic fraternal organization in Chicago in the 1940s ... The gang branched into Hartford’s South End about three years ago. Then as it gained control of ... [local] drug dealing ... dissident Latin Kings began Los Solidos ... Los Solidos with anywhere from 500 to 2,000 members ... [is] the biggest Hartford gang.... Members talk about being a family that offers support and love and unity against the threats of a hostile world. "If you live where we come from, you see we offer the best," said Martin (Sharp) Delgado, a 22-year-old Solido with two children, 4 and 2.

As they do elsewhere (Fagan 1989), street gangs now control Hartford’s drug trade, providing both power and a lucrative source of income for high ranking members and a sense of community and purpose for the rank and file. Unlike the legal employment market, which creates few jobs for minority youth, the illicit drug trade has numerous "job openings." Many Puerto Rican youth find initial employment as either "lookouts" who monitor the appearance of the police or as "pagers" and "runners," middle men who negotiate transactions between drug customers and "gates," which are apartments, commonly controlled by gangs, that serve as distribution centers for neighborhood drug sales. Notably, in the early 1990s, Hartford had the highest per capita rate of narcotic arrests in the country. In 1990, for example, there were 297 narcotic arrests of adolescents under the age of 17. In a study of under 21-year old entrants into the national Job Corp program, the Center for Substance Abuse Treatment (1995) found that 18 percent of participants who reported that they were gang members also reported illicit drug use compared to 3 percent of those who were not gang members.

Maria and her boyfriend, Juan, were clean-cut Puerto Rican kids who grew up in Hartford and "hung" with kids in the neighborhood. When she got pregnant, they moved into his parents’ house, and she went to school at night. They both worked, but, according to Maria, it was "tough making ends meet." Through his connections to gang-involved friends, Juan began dealing drugs to make extra money, and spent a lot of time on the street. He had grown up with a number of boys who were now drug dealers. Then he "made it big," and had a set of boys who were out on the street selling drugs under his direction. The income was substantial. Maria had a private doctor for her baby, they moved into their own apartment, they had a car, and she was able to purchase nice clothes and jewelry. She became involved in the dealing activity, and her four female cousins became sexually involved with gang members. One of her cousins is still involved with one of the biggest dealers in Hartford, another cousin’s partner is a gang leader who just got out of jail. Still another cousin just "escaped" from Puerto Rico where she was being "held captive" by her boyfriend, also a gang member. Maria’s boyfriend started being unfaithful to her, because, as she explained, "part of being a big dealer is you have beautiful women after you." He also started to control her behavior and set a curfew. Maria complained, "If I didn’t do what he wanted, he’d withhold my money. See, I had two kinds of money — one allowance for me and one for the baby." Ultimately, Maria left Juan in an effort to get away from gang involvement. (Unpublished interview data, Hispanic Health Council)

The impact of drug trafficking in Hartford’s street gangs is seen in the case study of Maria, a participant in Las Jovenes, a Hispanic Health Council demonstration project on gang prevention among teenage girls 12-16 years of age.
both Hartford’s residents and visitors. (Piurek, Brown 1990)

Typical is the following account reported by a Puerto Rican man interviewed in Project COPE,

Gangs cause the violence. Like this little kid, Edgar. He’s about 12 years old. He started bothering me. He picked me to always mess with. He’s a gang member. Cause he’s a gang member, he thinks he can do that. (Unpublished interviewdata, Hispanic Health Council)

Notable among the types of violence perpetuated by gangs is the drive-by shooting as well as other forms of rival assassination, which have become regular features of youth gang activity in recent years (Spergel 1984). Consequently, while the rates for most types of crime decreased in Hartford in 1993-94, one of the few categories “that showed an increase [was] murders, up from 30 to 57, which was attributed to gang related activity” (Sequin et al 1995). Moreover, gang members are both perpetrators and victims of violence. S. Singer (1981) found that 94 percent of gang members who had been victims of violence also reported that they had committed at least one serious assault. Exemplary of the relationship between the drug trade and violence is the following account provided by a participant in Project COPE.

I’m involved in violence every day, just to get by. Everyday I do something. Yesterday, this guy was going to cop [buy drugs]. He wanted to buy 5 bags for $43. I saw that money. I called my friend and we jumped him and took his money. I just saw the money and went for it. (Unpublished interviewdata, Hispanic Health Council)

Beyond drug use and violence, gang membership generally puts youth at heightened risk for exposure to AIDS. For many Puerto Rican teenagers, AIDS has a special meaning because it has touched their lives through the infection of someone they know or love. Because of the disproportionate rate of HIV infection among Puerto Ricans, there are many young people who have lost one or even both parents or other relatives to AIDS. Additionally, as Marin stresses,

It should be kept in mind that acculturation processes, personality, and subgroup differences will have powerful effects on the values held by individual members of any culture. (1988)

For example, a major conflict of adolescence emerges from an attempt to understand one’s own sexual identity, i.e. what it means to be a female or a male. For Puerto Ricans sexuality tends to be a somewhat more private and personal matter than for Whites. Often, sexual issues are not even discussed between sexual partners. However, adolescents are exposed to a variety of often conflicting influences with varying outcomes in terms of resulting beliefs and values. In a study conducted by Canino (1982) with female Puerto Rican adolescents residing in Philadelphia, for example, it was found that sex role expectations appear to be changing in three areas: attitudes towards childrearing, values related to maintaining virginity, and beliefs about working outside the home. In terms of virginity attitudes, half of the first generation female adolescents studied said that the male should also be a virgin until marriage, suggesting a rising acceptance of sexual equality among these adolescents. The data from this study also suggest differing attitudes among first generation U.S.-born and Island-born Puerto Rican adolescents.

Recently, members of our research team in Hartford completed a study of AIDS attitudes, knowledge, and risk behaviors in a stratified sample of 246 adolescents aged 12-19 years (59% Hispanic) structured by ethnicity, age, gender, and peer group through Project YOUTH. Puerto Rican boys in this study were more likely (68%) than African American boys (60%) to be uncertain that condoms provide any real protection from AIDS. They also were much more likely to be unsure if they could protect themselves from contracting AIDS (13% for African Americans vs. 32% for Puerto Ricans). Overall, Puerto Rican youth were less like to worry about getting AIDS (15%) than either African American (22%) or White youth (29%) and were less knowledgeable about the sharing/re-use of drug injection equipment as a route of HIV infection. Almost half of the Puerto Ricans (43%) believed that AIDS could be transmitted by mosquitos. They were also more likely to believe that you can get AIDS by eating food prepared by a person with HIV infection, that the virus is spread by sneezing and coughing, that there is a cure for AIDS, that you can tell if someone has HIV infection by looking at them, and that an HIV test protects you from infection. Among the Puerto
Rican youth in the study, only 15 percent reported that AIDS was a more important issue in their lives than gangs, only 20 percent indicated that AIDS was of greater importance to them than violence, and only 17 percent stated that AIDS was a greater concern to them than alcohol/drug use. Participants in this study who indicated they were members of street gangs (all of whom were Puerto Ricans) were significantly more likely to drink alcohol (P < .05) and use drugs (P < .0001) than individuals who were not gang members. Gang members also were more likely to report multiple sex partners (P < .001) than non-members.

CONCLUSION
It has been the argument of this paper that substance abuse, violence, and AIDS are not best understood as three separate, coterminous problems in the inner city. Rather, they form a socioeconomically contextualized complex of mutually reinforcing components of a syndemical health crisis that we have termed SAVA as a way of emphasizing underlying interconnections. SAVA constitutes a critical threat to the lives of the Puerto Rican adolescents and adults we have been studying and attempting to assist through our research and intervention projects in Hartford. It is our sense that if we seek to develop programs that meaningfully address the problems faced by these youth and their counterparts in cities across the country we need a holistic perspective that sees the significant linkages between various health and social conditions (Bernard 1990). While common in the social sciences to break social phenomena down into manageable units for purposes of research, to the degree that this reductionist strategy blocks recognition of interconnected processes and conditions its utility is limited and its product distorted. As Eric Wolf asks,

If there are connections everywhere, why do we persist in turning dynamic, interconnected phenomena into static, disconnected things? (1982)

Introduction of terms like SAVA and syndemic are intended to move social science analyses of the problems of the inner city toward the kind of holistic understanding that is needed to effectively address critically pressing health and social issues.

END NOTES
1 This team consists of researchers from the Hispanic Health Council and the Institute for Community Research. Members of this research team are engaged in a number of studies that have provided the life history, ethnographic, and survey data presented in this paper, including Project COPE II (supported by a grant from the National Institute on Drug Abuse), Project YOUTH (supported by grants from the Public Welfare Foundation and the Connecticut State Department of Public Health), the AIDS Community Research Group Studies (supported by grants from the Connecticut State Department of Public Health), and the Drinking Patterns of Puerto Rican Men Study (funded by a grant from the National Institute on Alcohol Abuse and Alcoholism).

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