HHS Public Access

Author manuscript

AIDS Behav. Author manuscript; available in PMC 2018 September 01.

Published in final edited form as:

AIDS Behav. 2017 September ; 21(9): 2561–2578. doi:10.1007/s10461-016-1578-4.

Interpersonal attacks on the dignity of members of HIV key populations: A descriptive and exploratory study

Samuel R. Friedman[1], **Enrique R. Pouget**[1], **Milagros Sandoval**[1], **Diana Rossi**[2], **Pedro Mateu-Gelabert**[1], **Georgios K. Nikolopoulos**[3], **John A. Schneider**[4], **Pavlo Smyrnov**[5], and **Ron D. Stall**[6]

[1]National Development and Research Institutes, Inc., Institute for Infectious Disease Research, 71 West 23rd St., 4th floor, New York, NY, 10010

[2]University of Buenos Aires and Intercambios Civil Association, Corrientes 2548, Piso 2 Oficina D, Buenos Aires, Argentina, 1046

[3]Medical School, University of Cyprus, Cyprus

[4]Chicago Center for HIV Elimination, Department of Medicine | Department of Public Health Sciences, University of Chicago 5837 South Maryland Avenue, MC 5065 Chicago, IL 60637

[5]Alliance for Public Health, 5 Dilova St., building 10A, 03680 Kyiv, Ukraine

[6]Center for LGBT Health Research, Dept. of Behavioral and Community Health Sciences, Graduate School of Public Health, University of Pittsburgh, Pittsburgh PA 15261

Abstract

Attacks on peoples' dignity help to produce and maintain stigmatization and interpersonal hostility. As part of an effort to develop innovative measures of possible pathways between structural interventions or socially-disruptive Big Events and HIV outbreaks, we developed items to measure dignity denial. These measures were administered to 300 people who inject drugs (PWID), 260 high-risk heterosexuals who do not inject drugs (HRH), and 191 men who have sex with men who do not inject drugs (MSM). All of the PWID and many of the high risk heterosexuals and MSM were referred to our study in 2012–2015 by a large New York City study that used respondent-driven sampling; the others were recruited by chain-referral. Members of all three key populations experienced attacks on their dignity fairly often and also reported frequently seeing others' dignity being attacked. Relatives are major sources of dignity attacks. MSM were significantly more likely to report having their dignity attacked by police officers than were the

Corresponding author: SR Friedman, NDRI, 71 W23rd St., 4th fl., New York NY 10010, phone: (212)845-4467, fax: (212)845-4600, friedman@ndri.org.

Compliance with Ethical Standards:

Disclosure of potential conflicts of interest: The authors (Friedman, Samuel R; Pouget, Enrique R, Sandoval, Milagros; Rossi, Diana; Mateu-Gelabert, Pedro; Nikolopoulos, Georgios K; Schneider, John A; Smyrnov, Pavlo; Stall, Ron D) all declare that they have no competing interests.

Research involving human participants and/or animals:

This article does not contain any studies with animals performed by any of the authors.

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committees and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent: Informed consent was obtained from all individual participants included in the study

other groups. 40% or more of each key population reported that dignity attacks are followed "sometimes" or more often both by using more drugs and also by using more alcohol. Dignity attacks and their health effects require more research and creative interventions, some of which might take untraditional forms like social movements.

Keywords

Dignity attacks; stigma; key populations; Big Events; HIV; health; people who inject drugs; men who have sex with men; heterosexuals

INTRODUCTION

Attacks on people's dignity are quite common (1). To some extent such attacks are implicit in patterns of the subordination or oppression of people based on race/ethnicity, job type or work status, sex, sexual orientation, religion or drug use. In addition, a culture based to a large degree on concepts of the relative value and status of people is quite prone to interpersonal dignity attacks between people who might fall into the same categories of an intersectional analysis. Such attacks can create many forms of pain ranging from stigmatization to interpersonal hostility.

Neither dignity nor dignity attacks are new topics for public health. Jacobson has reviewed and described research on them quite extensively (2 – 5). Furthermore, unlike some social and behavioral science concepts like stigma or micro-aggression, attacks on dignity are clearly emic categories rather than academic inventions. The streets of the US South resounded with calls for dignity during the civil rights movement of the 1960s, as did the streets of Egypt and Tunisia in 2011 and as do conversations by workers about their treatment at work. In spite of this, however, the field has lacked adequate measures of dignity denial as an event and as a social process. (To some extent, of course, social science concepts do diffuse into wider populations. "Stigma" has become somewhat emic in some mental health populations and HIV-related target populations such as men who have sex with men (MSM) and people who inject drugs (PWID), particularly among those who interact with HIV programs frequently.)

We thus developed questionnaire items to measure attacks on dignity in the context of a larger research project to develop measures of hypothesized *pathways* by which major social (or "structural") interventions such as neighborhood-uprooting urban renewal or reductions in fire service coverage that result in urban "burnouts" (7, 8) or large-scale economic, political, social, and climate-driven "Big Events" might lead some people to become members of Key Populations such as PWID or sex workers; and how they can lead members of Key Populations such as PWID, men who have sex with men (MSM) or other populations such as heterosexuals to engage in high-risk behaviors (6, 9 – 11). Big Events are an important macro-social phenomenon of considerable interest to HIV research since a number of them have been followed by major HIV outbreaks (6, 9 – 11). We developed a theorization of pathways from macro-social change or Big Events to HIV risk in terms of CHAT (Cultural-Historical Activity Theory); this included an outline of relevant measures that need to be developed (6). Pouget et al (12) showed that a number of measures that were

developed—including the measures described here--showed promising reliability and validity among a New York City PWID sample. (Similar analyses for heterosexual and MSM samples are being conducted.)

In this paper, we focus on a set of measures developed as part of this project that focus on attacks on peoples' dignity (6, 11, 12). Attacks on dignity seem to be an inherent part of current economic and political structures and cultures (1). Thus, research on dignity attacks should be important for issues like micro-aggression and other ongoing experiences that may be particularly likely to affect some populations at high risk for HIV. We describe these measures and discuss how they might be used in studies of current HIV risk and/or in studies of social intervention or change might unleash HIV outbreaks.

Some attacks on peoples' dignity are deeply structural, but others are interpersonal (1). Our focus in this paper is on interpersonal attacks on people's dignity, although some of these attacks are carried out by people in the process of fulfilling their systemic roles such as police officer or counselor.

One result of dignity attacks is that they can be internalized as stigma (13, 14), which has many negative health consequences through creating stress, producing obstacles to accessing health care, and much else (15 – 20). Link and Phelan (15) developed the concept of "structural stigma" which has some parallels to the concept of structural attacks on dignity. Hatzenbuehler recently edited a special issue of *Social Science and* Medicine on "Structural stigma and health" which contains a range of papers on this issue, including Hatzenbuehler's useful introduction to the thoughts and literature in the field as well as to the special issue (21, 22). Hatzenbuehler and his colleagues have themselves published extensively on ways in which structural stigma can have negative consequences for the health of gay men (23 – 26).

Other related concepts are "enacted stigma" and "microaggression" (13, 27, 28). In a relatively early definition of enacted stigma (towards people with epilepsy), Jacoby defined the term as follows: "In this dichotomy, enacted stigma refers to episodes of discrimination against people with epilepsy, solely on the grounds of their social unacceptability; whereas felt stigma refers to the shame associated with being epileptic and the fear of enacted stigma." (29) More recently, a USAID document on HIV/AIDS related discrimination and stigma offers the following definition: "We define discrimination (or enacted stigma) as the negative acts that result from stigma and that serve to devalue and reduce the life chances of the stigmatized." (30) Enacted stigma thus differs from dignity attacks in that it is purposive and aimed specifically at a given stigmatized characteristic of its target. Dignity attacks, on the other hand, may be much less specific statements or actions. Indeed, at the more macro-level, we have described ways in which the implicit devaluation of workers as opposed to machinery can serve to attack workers' dignity without any action or words that explicitly target the workers (1).

It should be noted that the concept of microaggression is based on experiences of "indignities," and thus is a recent re-formulation of the concept of dignity denial or dignity attack. Swann et al. argue that microaggressions "are frequently non-deliberate and

unconscious on the part of the actor," which is in accordance with the concept of dignity attacks (28). We use the term dignity attacks both because dignity and dignity attacks are firmly rooted in the vocabularies of the victims of these attacks (as shown by the widespread explicit mention of dignity issues in the grievances expressed by social movements) and also because there is a well-rooted literature on dignity and its denial in philosophy, social science and in the health sciences. Both terms, it should be noted, refer to behaviors frequently though not always enacted as part of larger systems of oppression or subordination such as racism, sexism, heterosexism, prejudice against the jobless, or drug wars.

Research on macro-social (structural) interventions, Big Events, structural stigma, structural and individual dignity attacks, enacted stigma, micro-aggression, individual stigma, and HIV outbreaks can and should be integrated. One way in which these concepts might be tied together is that macro-social interventions or Big Events can sometimes exacerbate, and sometimes ameliorate, both the ways in which social structures attack individuals' dignity and the degree of structural stigma in a society. These, in turn, can influence the extent to which individuals experience enacted stigma and various micro-aggressions, some of which can lead some individuals to internalize these as stigma (spoiled identity). Since these concepts are still being developed, and research in this area is in its early stages, we hasten to warn that dignity attacks may well affect HIV via pathways like exacerbating interpersonal hostilities that do not involve stigma at all. Furthermore, we would argue, it is useful to differentiate between processes like dignity attacks or intravention (31) that create or maintain social psychological effects such as stigma or internal norms and the social psychological effects themselves. These supra-individual and interactional processes often are rooted in macrosocial and interpersonal processes, institutions and structures that are quite independent of what we usually think of when we think of terms like "stigma," micro-aggression, or even "structural stigma."

This paper is descriptive and exploratory. It aims to introduce measures of dignity attacks to a public health audience and to describe and compare their frequencies among three key populations in New York City—PWID, high-risk heterosexuals (HRH) and MSM. Since we hope that other researchers will use these or similar items to investigate if and how dignity attacks lead to personal or public health consequences, we present extensive data in our tables that others can use as benchmarks in planning their own research.

METHODS

Samples

The sample consists of 300 PWID, 260 high-risk heterosexuals who do not inject drugs, and 191 men who have sex with men who do not inject drugs. All of the PWID and many of the high risk heterosexuals and MSM were referred to our study by a large New York City RDS study in 2012–2015. For HRH and MSM we supplemented this by asking participants who had been referred to us to help us recruit others who would qualify. These potential participants were screened for eligibility by our field director (usually over the telephone). Eligibility criteria for each group included (1) age 18 or older, (2) residency in the NYC metropolitan area, and (3) fluency in English. In addition, PWID participants had to report

having injected illicit drugs in the past 12 months; high-risk heterosexuals had to report having had sex with an opposite sex partner in the last 12 months; and MSM had to be male and to report having had sex with a man in the last 12 months.

Measures

Participants were interviewed, with informed consent, using a long interview form that covered activities, experiences, norms and roles in specific contexts, and how normative conflicts and other situations are perceived and resolved (3, 16). These interviews typically took between 90 minutes and two hours. Study methods and questionnaire items were approved by National Development and Research Institutes (NDRI)'s Institutional Review Board. Participants generally reported that they enjoyed the interview topics and felt respected. They were reimbursed $30 for their time and effort.

In addition to standard demographic and behavioral items, respondents were asked a number of questions about attacks on their dignity. Each participant was asked how often people had spoken or acted towards them in the last year in a way that felt like they were attacking their dignity or demeaning them. They were also asked "In the last year, how often have you been present when someone spoke or acted towards someone else in a way that attacked their dignity or demeaned them?" For each of these questions, response categories were: 1. Never; 2. 1 to 2 times; 3. 3 – 10 times; 4. About once a month; 5. About once or twice a week; 6. Daily or more. For these analyses, responses of "don't know" or refusal to answer were treated as missing.

Respondents were also asked "What aspects of you or your life did you think they were demeaning you about?" They were given a list of possible answers to endorse or not to endorse as one that had been attacked.

They were also asked "When they attack your dignity, how often do you react in each of these ways?" We gave them a list of possible reactions, and asked them to tell us for each whether they reacted in this way 1. Never; 2. Rarely; 3. Sometimes; 4. Often; 5. Very often. (Again, "don't know" and refusals to answer are treated as missing.)

They were also asked about *who* attacked their dignity: "Please tell me who are the people and/or groups who have attacked your dignity or demeaned you in the way that hurt you the most (circle all that apply)." We provided them a list of 41 categories of such potential attackers for them to choose among.

Analyses of associations of key socioeconomic variables (lacking a job, being homeless and very low income) with dignity denial experiences were conducted for two reasons. First, these socioeconomic variables are likely to be affected by major social change or macro-social interventions, so their associations with dignity denial are crude proxies for how these might affect dignity denial experiences. Secondly, we would anticipate that homelessness, joblessness and very low income would be associated with a higher level of dignity denial experiences. To the extent that we find such associations, it tends to provide a degree of convergence validation for the indicators. It also suggests that social changes or interventions that worsen these socioeconomic indicators might increase attacks on dignity.

To define “very low income” we approximated median splits for each Key Population sample. For PWID and HRH, this led us to define “very low income” as less than $10,000 per year. MSM had a slightly higher income distribution, but even so the “very low income” split for them was defined as “less than $12,500 per year.”

Analyses

Analyses were conducted with IBM SPSS (ver. 22). These analyses were exploratory ones, since no prior research has been done on how these measures might differ among the three Key Populations and very little empirical research has been done on dignity attacks in these populations.

Statistical analyses included frequency descriptions and cross-tabulations. Statistical significance was estimated by chi square (and, if needed, exact tests). We used linear-by-linear association tests to compare ordinal variables (32). Pearson correlation (r), linear regression and logistic regression analyses are used to study associations of dignity attacks and behaviors. P-values are presented in the tables rather than the text to improve readability.

RESULTS

Participants’ characteristics and p-values for differences between key populations are presented in Table 1. For some analyses, the sample sizes are smaller because of the non-applicability of a question to some respondents. PWID were older than either the MSM or the heterosexual sample; and heterosexuals were alder than MSM. High-risk heterosexuals were more likely than either PWID or MSM to be Black or Hispanic. PWID were most likely never to have married, followed by MSM and then HRH. PWID were more likely to be homeless than the HRH. Most PWID reported income less than $10,000 a year, as did almost half of the HRH and 23% of MSM. (The low incomes of the HRH and many characteristics of all three groups derive in part from the sampling frame, as discussed above.) Approximately a quarter of each group report having exchanged sex for money or drugs in the past 30 days.

Self-reported HIV prevalence levels of all three groups are high, with 21% of PWID, 13% of MSM and 7% of HRH reporting that they have been diagnosed as HIV-positive.

Frequency of being attacked and of seeing others attacked

Attacks on the dignity of all groups occurred relatively frequently, with dignity attacks occurring about once a month or more for 46% of PWID, 39% of HRH, and 53% of MSM. As Table 2 describes, such attacks were reported more by MSM and PWID than by HRH. They observed other people’s dignity being attacked even more, with 80% of PWID, 64% of HRH and 93% of MSM reporting observing dignity attacks about monthly or more. About a third of PWID report seeing others’ dignity attacked daily; and more than half of both MSM and PWID report seeing this on a weekly basis or more. As Table 2 shows, taking the distributions as a whole, PWID and MSM were more likely to observe attacks on others’ dignity than were HRH.

What their dignity was attacked for

There are interesting commonalities and differences among groups in what they report were the reasons why their dignity was attacked (Table 3). Approximately half of each group had their dignity attacked because of the people they hang out with; and 30% or more of each group were attacked for being drug users. (Although this was much more common for PWID than for these samples of HRH and MSM who do not *inject* drugs.) All three groups had sizeable proportions who reported dignity attacks for not having a job (although this was particularly common for HRH), the way they look (which was particularly common for MSM), and their clothing. People's dignity was attacked on the basis of their personality for 25% of HRH and 18% of MSM.

PWID were particularly likely to be attacked for being injectors, and (to lesser degrees) for being fat or skinny, having a poor housing situation, or being infected with HIV or hepatitis C. HRH were particularly likely to report having their dignity attacked for lack of education or being a single parent or (along with PWID) for how they earn their money. Over half of MSM were attacked for their sexual orientation and who they had sex with, and 28% of them for the way they speak. Interestingly, MSM were particularly likely to have their dignity attacked because of their race, suggesting enhanced vulnerability to racist attacks among MSM in New York.

Who were the perpetrators of the attacks

Table 4 presents data on who attacked respondents' dignity. Relatives—and perhaps surprisingly, particularly mothers—were major sources of attacks on PWIDs' dignity. Program staff or case managers were sources of attack for 18% of PWID (and 17% of HRH), and hospital or clinical staff for 13% of PWID—which suggests that sources of assistance may sometimes be sources of attack on PWIDs' dignity. MSM and HRH were also likely to have their dignity attacked by relatives, though not to the same extent as PWID. MSM reported having their dignity attacked by neighbors (30%), bosses (20%; 31% among those with jobs) and co-workers (21%; 34% among those with jobs), police officers (25%), store owners (27%) and remarkably (but perhaps unsurprisingly) 53% reported having their dignity attacked by strangers. Police officers were significantly more likely to be reported as attackers of their dignity by MSM than either HRH (16%) or PWID (12%); in further analyses, this did not appear to be related to race within any key population although the statistical power of this test was low due to small N's for mixed race.

How do they react?

More than 50% of each group report that when their dignity is attacked, they very often or often shrug it off, pretend they do not care, and do nothing about it (Table 5). HRH are more likely than members of the other groups to tell the perpetrator off; PWID to cry inside, to use more drugs or to try to change their behavior or what they look like so as to prove the perpetrator wrong. MSM, it should be noted, say they never (47%) or rarely (16%) try to change themselves in reaction to dignity attacks.

Social characteristics and frequency of dignity denial experiences

Table 6 provides data within each Key Population for associations between dignity attack experiences and socioeconomic indicators. In seven of nine associations, the jobless, homeless and very low income members of each key population were significantly ($p < .05$) more likely to report having their own dignity attacked more often. For homelessness among HRH, the directionality is the same, but only indicate a trend towards significance ($p < 0.06$). Among MSM, it appears that homelessness is not associated with the frequency of dignity attacks. Neither sex nor engaging in sex work in the last 30 days was associated with being attacked within either the PWID or HRH groups; but among MSM, those who received some form of payment for sex had their dignity attacked more frequently.

Social characteristics and changes in drug use, alcohol use and sexual frequency

Table 7 provides data within each Key Population for associations between social characteristics and how participants react when their dignity is attacked. Among people who inject drugs, a higher income and selling sex make participants more likely to react to attacks on their dignity by using more drugs, and sex sellers and the homeless by using more alcohol and having more sex. Among high-risk heterosexuals, sex workers report more drug use and alcohol use when their dignity is attacked, lower income people report more alcohol use, and those without jobs report that they react with more alcohol use and more sex. Among MSM, those without jobs, with low incomes and who engage in sex work react by using more drugs and alcohol, and the homeless and sex traders by having more sex.

Exploratory associations with risk behaviors

Although we see dignity attacks as most importantly related to longitudinal dynamics that will lead youth and, perhaps to a lesser extent, their elders, to be more likely to take up high-risk sexual and drug behaviors and roles, it is also useful to understand the cross-sectional associations of dignity attacks with measures of risk behavior. For these analyses (Table 8), we looked at the correlations of the frequency of having one’s dignity attacked with selected risk behaviors and with how often participants responded to dignity attacks by increasing their drug use, alcohol use, and sexual frequency. We also looked at the correlations of how often participants responded to dignity attacks by increasing their drug use, alcohol use, and sexual frequency with the specific risk behaviors. Multivariate logistic regressions were run controlling for age, race/ethnicity (Non-Hispanic White vs. other), and (for PWID and HRH) sex. In these cells, in addition to r, the adjusted odds ratio and 95% confidences intervals are also given. For MSM, the regression coefficients and confidence intervals for the analysis of number of sex partners are from linear regression since the dependent variable is continuous.

Among PWID, dignity denial frequency has significant positive associations with receptive syringe sharing, distributive syringe sharing, and any exchange sex, as well as with more often responding to dignity denial with more drugs, more alcohol and more sex.

Among HRH, dignity denial frequency has significant positive associations with more often responding to dignity denial with more drugs, more alcohol and more sex. It has a weak negative correlation with unprotected sex with a non-main partner.

Among MSM, dignity denial frequency significant positive associations with any exchange sex and with more often responding to dignity denial with more drugs and more alcohol (and a tendency (p .068) with more sex. It has a negative correlation with the number of sex partners (which could mean that people more "into the scene" are less often in a position to have their dignity attacked.)

For all groups, responding to dignity denial with more drugs, more alcohol and more sex are positively related to most indicators of sexual risk behavior (and for PWID, with receptive and with distributive syringe sharing.)

DISCUSSION

Overall, members of all three key populations experienced attacks on their dignity fairly often. Such attacks were reported more often by people who inject drugs and by men who have sex with men, which is not terribly surprising since both drug injection and same-sex-sex are socially stigmatized. Furthermore, members of all groups report seeing other's dignity being attacked fairly often, with a third of PWID seeing this daily and more than half of both PWID and HRH seeing it weekly or more.

Our findings are of course limited by possible errors in self-report. We would in particular mention that there may be differences in proclivities to report or recognize dignity attacks among the different populations being sampled. This could occur if populations that are frequently attacked or stigmatized are more sensitive and thus interpret non-attacks as attacks in some cases.

Findings are limited in several other ways as well. Since the study is cross-sectional, what can be learned about causation is extremely limited and tentative. The relatively small study sizes of each of the three sub-samples has limited the extent to which we can conduct multivariate analysis. Furthermore, there are undoubtedly experiential and cultural differences in the ways that the three subpopulations (PWID, HRH, and MSM) interpret some of the questionnaire items. Differences in race/ethnicity, sex, age, HIV status and many other variables may also be associated with differences in how participants interpret some items.

Nonetheless it is noteworthy that almost two-fifths of "high-risk heterosexuals" reported having their dignity attacked in the last month. Since some of them use non-injected drugs and/or engage in sex trade, some of these attacks may be due to this. From Table 3, however, we see that the two most frequent reasons they give for their dignity being attacked are their economic circumstances and the people they hang around with. More research is needed for us to get a comprehensive understanding of this phenomenon, but we would suggest as a working hypothesis that an ostensibly meritocratic society based on interpersonal competition and political campaigns that attack the dignity of those who are not highly successful may generate a culture in which interpersonal dignity attacks are frequent.

The attacks being studied are interpersonal ones, but the people who attack the different populations have some differences. Relatives, and particularly mothers, are major sources of dignity attacks for PWID (and relatives are also sources, to a lesser extent, for HRH and

MSM.) Some of these attacks on their dignity probably arise out of (often self-defeating) criticisms or other processes of interaction between relatives and drug users, but this is probably worsened by the war on drugs and other forms of *public* attacks on the humanity and dignity of people who use drugs (33 – 36). Similar attacks on sex work and sex workers may also help explain these data, since about a quarter of each population report having exchanged sex for money or drugs in the last month (14). MSM have their dignity attacked in a wide range of impersonal relationships, including by neighbors, bosses, co-workers, police officers, store owners, health care providers and strangers (35, 37, 38), and any resulting internalized stigma can also lead to worse health outcomes (39). While these attacks do occur, it is important to note that kin or other people can sometimes play a supportive role which is related to positive health outcomes including support of others around HIV prevention (40, 41).

Respondents in all three groups report that they very often shrug off attacks on their dignity. People who inject drugs seem to take such attacks particularly hard: They report crying inside, using more drugs or trying to change their behavior. MSM, on the other hand, seem to accept their being MSM far more than PWID accept their drug use, as indicated by over three fifths of MSM reporting they never or rarely try to change themselves in reaction to dignity attacks. This self-acceptance is probably due to the self-confidence and pride that many gay and bisexual men have developed through their social movements and other victories (1, 6, 42.) In addition, gayness and perhaps bisexuality or queerness in some localities, including New York, are probably more unifying *self*-identities than injecting drugs, with much more organized political activity and community building and tangible gains (43). However, while there may be an appearance of unification within MSM, the *intersection* between these key populations and race may lead to multiple subordination. For example, MSM who are also racial/ethnic minorities are at significantly increased risk for social disadvantage and poor health outcomes (44 – 47). In addition, the relatively high attacks on dignity by “other gays” towards the majority-Black MSM respondents in this sample suggests that these could be attacks by other MSM in majority race categories. The double minority status of Black MSM and feelings of exclusion from dominant LGBT populations has led some to ask whether Black MSM are part of the rainbow (48).

Some members of all three groups, PWID, HRH and MSM, do report that dignity attacks lead them to increase their sexual, alcohol and/or drug behaviors. To the extent that they do so, this seems to be associated with high-risk behaviors with controls for confounding by race/ethnicity, age and where appropriate for sex—and thus perhaps with HIV transmission rates. We interpret this result as consistent with dignity attacks being a switching point that leads some people onto pathways of more alcohol, more drugs and/or more sex and this leads to increased probability of HIV risk. This tends to support our hypothesis that dignity attacks may be part of a pathway toward HIV vulnerability. If confirmed in future longitudinal studies (or trials of interventions to reduce dignity attacks), findings of this sort would strongly support the pathways approach to analyzing dignity attacks and would provide some support for the CHAT model of Big Events and macro-structural interventions as presented by Friedman et al in this journal (6).

Data on interpersonal differences in joblessness, homelessness, and very low income may not be the best proxy for the effects of macro-social (structural) interventions or of Big Events (since misfortune caused by these may be reacted to very differently by one's social circle and by oneself than a similar kind of misfortune in the absence of such visible interventions or in normal times), but it is all we have available in this dataset. By and large, homelessness, joblessness and very low income seem to be associated with having one's dignity attacked. This finding is consistent with our discussion of dignity attacks as fostered by class and status differences in a culture based on invidious comparisons. This pattern of findings tends to increase our support for the validity of the measures of dignity attacks, and also lends (indirect) support for the underlying theory that some macro-social interventions or Big Events may tend to increase dignity attacks (to the extent that they produce joblessness, homelessness and very low incomes). Further, these same social characteristics and engaging in the sex trade are to some extent associated with reacting to dignity attacks by using more drugs or alcohol.

Since dignity attacks and stigma are associated with a range of ill health effects and with less willingness to use health services (2 – 5, 15 – 20) (and particularly since these data suggest that sizeable proportions of these populations have their dignity attacked by service providers—and we suspect that they almost certainly tell their friends about this), this paper suggests that dignity attacks may be important to study. Furthermore, we need more research on how macro-social interventions and Big Events affect dignity attacks and whether this is a pathway that helps determine whether a given set of interventions or Events does or does not lead to increases in PWID, sex work, and/or HIV or other diseases.

Thus, we are calling for several types of research. We need qualitative research into dignity attacks as they take place in communities and at workplaces, into how they are related to processes of intersectional oppression or subordination, how they affect groups of people at high risk of becoming PWID, sex workers, or of engaging in high-risk sex, and relatedly how they affect the lives and HIV outcomes of PWID, high-risk heterosexuals, and MSM.

Prospective studies are also needed of macro-social interventions, Big Events and other social changes; of the conditions and pathways that affect whether they do or do not lead to changes in attacks by various groups of actors on the dignity of PWID, high-risk heterosexuals, sex workers and MSM; of if and how such attacks lead to changes in risk and transmission behaviors, in risk networks, in social networks, and in health outcomes like HIV transmission rates, involvement in the continuum of care, and morbidity and mortality. A related issue for such prospective studies is if and how macro-interventions or events and dignity attacks, along with other pathways (1, 10 – 12), lead some youth to enter into high risk networks and behaviors.

Such research should integrate issues of structural stigma and individual stigma (2 – 5, 13 – 26). These are related concepts, and combining the insights and measures developed in the stigma literature should improve what we learn from studies such as those just discussed.

A final area that needs research is how to prevent negative pathways from developing and/or how to intervene in those that do develop. Specifically, we need research on how to keep

macro-social changes (whether based on interventions or not), Big Events, oppression, or exploitation from precipitating structural or individual attacks on dignity; and of how to mitigate the effects of such attacks as do occur.

Issues of dignity attacks and stigmatization are not merely matters for study, of course. They are also issues for action (1, 49). One approach to this might be to encourage and to engage with social movements to change police practices including attacks on dignity that have been important in the USA, as is evidenced by the current Black Lives Matter movement and by Stonewall and subsequent gay activism. People who use drugs and sex workers have also engaged in considerable activism around these issues (33). Another might be to find other ways to alter the social and cultural contexts of people's lives that encourage some relatives or friends to attack others' dignity.

Acknowledgments

Funding: This research was supported by NIH grants R01DA031597, P30DA011041, DP1DA034989 and R01MH100021. The International AIDS Society (IAS) and the National Institute on Drug Abuse supported the post-doc fellowship of GN. We also acknowledge support from the University of Buenos Aires grants UBACyT 20020130100790BA and UBACyT 20020100101021. The views presented in this paper represent only the authors and not the funding agencies.

References

1. Friedman S, Rossi D, Ralón G. Dignity denial and social conflicts. Rethinking Marxism. 2015 Jan 2; 27(1):65–84.
2. Jacobson N. Dignity and health: A review. Social Science & Medicine. 2007; 64(2):292–302. [PubMed: 17034918]
3. Jacobson N. Dignity violation in health care. Qualitative Health Research. 2009; 19(11):1536–47. [PubMed: 19797155]
4. Jacobson, N. Dignity & health. Nashville: Vanderbilt University Press; 2012.
5. Jacobson N, Oliver V, Koch A. An urban geography of dignity. Health & Place. 2009; 15(3):725–31.
6. Friedman SR, Sandoval M, Mateu-Gelabert P, Rossi D, Gwadz M, Dombrowski K, Smyrnov P, Vasylyeva T, Pouget ER, Perlman DC. Theory, Measurement and Hard Times: Some issues for HIV/AIDS research. AIDS & Behavior. 2013; 6:1915–1925. DOI: 10.1007/s10461-013-0475-3
7. Fullilove, MT. Root shock: how tearing up city neighborhoods hurts American and what we can do about it. 1. New York, NY: The Random House Publishing Group; 2004.
8. Wallace, D., Wallace, R. A plague on your houses: How New York was burned down and national public health crumbled. New York City: Verso Books; 1999.
9. Nikolopoulos GK, Fotiou A, Kanavou E, Richardson C, Detsis M, Pharris A, Suk JE, Semenza JC, Costa-Storti C, Paraskevis D, Sypsa V. National income inequality and declining GDP growth rates are associated with increases in HIV diagnoses among people who inject drugs in Europe: a panel data analysis. PloS one. 2015 Apr 15.10(4):e0122367. [PubMed: 25875598]
10. Friedman SR, Rossi D, Braine D. Theorizing "Big Events" as a potential risk environment for drug use, drug-related harm and HIV epidemic outbreaks. International Journal on Drug Policy. 2009; 20:283–291. [PubMed: 19101131]
11. Nikolopoulos GK, Sypsa V, Bonovas S, Paraskevis D, Malliori-Minerva M, Hatzakis A, Friedman SR. Big events in Greece and HIV infection among people who inject drugs. Substance use & misuse. 2015 Jun 7; 50(7):825–38. [PubMed: 25723309]
12. Pouget ER, Sandoval M, Nikolopoulos GK, Mateu-Gelabert P, Rossi D, Smyrnov P, Jones Y, Friedman SR. Developing Measures of Pathways that May Link Macro Social/Structural Changes with HIV Epidemiology. AIDS and Behavior. 2016 Jan.:1–3. [PubMed: 26370101]

13. Goffman, E. Stigma: Notes on the management of spoiled identity. Englewood Cliffs, N.J: Prentice Hall; 1963.
14. Simić M, Rhodes T. Violence, dignity and HIV vulnerability: street sex work in Serbia. Sociology of Health and Illness. 2009; 31(1):1–16. [PubMed: 19144087]
15. Link BG, Phelan JC. Conceptualizing stigma. Annual Review of Sociology. 2001; (27):363–85.
16. Risher K, Mayer KH, Beyrer C. HIV treatment cascade in MSM, people who inject drugs, and sex workers. Curr Opin HIV AIDS. 2015; 10(6):420–429. [PubMed: 26352393]
17. Mizuno Y, Purcell DW, Knowlton AR, Wilkinson JD, Gourevitch MN, Knight KR. Syndemic vulnerability, sexual and injection risk behaviors, and HIV continuum of care outcomes in HIV-positive injection drug users. AIDS Behav. 2015; 19(4):684–693. [PubMed: 25249392]
18. Baral S, Holland CE, Shannon K, et al. Enhancing benefits or increasing harms: community responses for HIV among men who have sex with men, transgender women, female sex workers, and people who inject drugs. J Acquir Immune Defic Syndr. 2014; 66(Suppl 3):S319–328. [PubMed: 25007203]
19. Malta M, Ralil da Costa M, Bastos FI. The paradigm of universal access to HIV-treatment and human rights violation: how do we treat HIV-positive people who use drugs? Curr HIV/AIDS Rep. 2014; 11(1):52–62. [PubMed: 24369409]
20. Mateu-Gelabert P, Maslow C, Flom PL, Sandoval M, Bolyard M, Friedman SR. Keeping it together: stigma, response, and perception of risk in relationships between drug injectors and crack smokers, and other community residents. AIDS care. 2005; 17(7):802–813. [PubMed: 16120497]
21. Social Science & Medicine. Special issue on Structural Stigma and Population Health. Feb.2014 103
22. Hatzenbuehler, Mark L. Introduction to the special issue on structural stigma and health. Social Science & Medicine. Feb.2014 103:1–6. [PubMed: 24445152]
23. Hatzenbuehler ML, McLaughlin KA, Keyes KM, Hasin DS. The Impact of Institutional Discrimination on Psychiatric Disorders in Lesbian, Gay, and Bisexual Populations: A Prospective Study. American Journal of Public Health: March 2010. 100(3):452–459. DOI: 10.2105/AJPH.2009.168815
24. Hatzenbuehler ML. The Social Environment and Suicide Attempts in Lesbian, Gay, and Bisexual Youth. Pediatrics. 2011 May; 127(5):896–903. Epub 2011 Apr 18. DOI: 10.1542/peds.2010-3020 [PubMed: 21502225]
25. Hatzenbuehler ML, O'Cleirigh C, Grasso C, Mayer K, Safren S, Bradford J. Effect of Same-Sex Marriage Laws on Health Care Use and Expenditures in Sexual Minority Men: A Quasi-Natural Experiment. American Journal of Public Health. Feb; 2012 102(2):285–291. DOI: 10.2105/AJPH.2011.300382 [PubMed: 22390442]
26. Hatzenbuehler ML, Bellatorre A, Lee Y, Finch BK, Muennig P, Fiscella K. Structural stigma and all-cause mortality in sexual minority populations. Social Science & Medicine. Feb.2014 103:33–41. [PubMed: 23830012]
27. Sue DW, Bucceri J, Lin AI, Nadal KL, Gina C, Torino GC. Racial Microaggressions and the Asian American Experience. Cultural Diversity and Ethnic Minority Psychology. 2007; 13(1):72–81. DOI: 10.1037/1099-9809.13.1.72 [PubMed: 17227179]
28. Swann G, Minshew R, Newcomb ME, Mustanski B. Validation of the Sexual Orientation Microaggression Inventory in Two Diverse Samples of LGBTQ Youth. Arch Sex Behav. 2016 Aug; 45(6):1289–98. Epub 2016 Apr 11. DOI: 10.1007/s10508-016-0718-2 [PubMed: 27067241]
29. Jacoby, Ann. Felt versus enacted stigma: A concept revisited: Evidence from a study of people with epilepsy in remission. Social Science & Medicine. Jan.1994 38(2):270.
30. USAID. CAN WE MEASURE HIV/AIDS-RELATED STIGMA AND DISCRIMINATION? CURRENT KNOWLEDGE ABOUT QUANTIFYING STIGMA IN DEVELOPING COUNTRIES. http://www.policyproject.com/pubs/generalreport/Measure%20HIV%20Stigma.pdf (Downloaded 8/14/2016)
31. Friedman, Samuel R., Maslow, Carey, Bolyard, Melissa, Sandoval, Milagros, Mateu-Gelabert, Pedro, Neaigus, Alan. Urging others to be healthy: "Intravention" by injection drug users as a community prevention goal. AIDS Education and Prevention. 2004; 16:250–263. [PubMed: 15237054]

32. Agresti, A. Categorical Data Analysis. 2. Hoboken, NJ: Wiley; 2002. p. 369-373.
33. Dziuban A, Friedman SR. A gap in science's and the media images of people who use drugs and sex workers: research on organizations of the oppressed. Substance Use and Misuse, Substance Use & Misuse. 2015; 50:508–511. print/1532–2491 online. DOI: 10.3109/10826084.2015.978194 [PubMed: 25544256]
34. Friedman SR. The political economy of drug-user scapegoating—and the philosophy and politics of resistance. Drugs: Education, Prevention, and Policy. 1998a; 1:15–32.
35. Friedman SR. HIV-related politics in long-term perspective. AIDS Care. 1998b; 10(Supplement 2):S93–S103. [PubMed: 9743731]
36. Tempalski B, Friedman R, Keem M, Cooper H, Friedman SR. NIMBY localism and national inequitable exclusion alliances: The case of syringe exchange programs in the United States. Geoforum. 2007; 38(6):1250–1263. [PubMed: 18978931]
37. Dale SK, Bogart LM, Galvan FH, Wagner GJ, Pantalone DW, Klein DJ. Discrimination and Hate Crimes in the Context of Neighborhood Poverty and Stressors Among HIV-Positive African-American Men Who Have Sex with Men. J Community Health. 2015 Dec 22. [Epub ahead of print].
38. Marcus U, Hickson F, Weatherburn P, Furegato M, Breveglieri M, Berg RC, Schmidt AJ. EMIS network. Antiretroviral therapy and reasons for not taking it among men having sex with men (MSM)--results from the European MSM Internet Survey (EMIS). PLoS One. 2015 Mar 20.10(3):e0121047. eCollection 2015. doi: 10.1371/journal.pone.0121047 [PubMed: 25793882]
39. Daniel H, Butkus R. Health and Public Policy Committee of the American College of Physicians. Lesbian, Gay, Bisexual, and Transgender Health Disparities: Executive summary of a policy position paper from the American College of Physicians. Ann Intern Med. Published online 12 May 2015.
40. Schneider JA, Cornwell B, Ostrow D, Michaels S, Schumm P, Laumann EO, Friedman SR. Network mixing and network influences most linked to HIV infection and risk behavior in a Black men who have sex with men HIV epidemic. American Journal of Public Health. 2012 Nov 15.
41. Schneider JA, Michaels S, Bouris A. Family network proportion and HIV risk among Black men who have sex with men. JAIDS. 2012 Sep 22. Epub ahead of print.
42. Drucker, P. Warped: Gay Normality and Queer Anti-Capitalism. Chicago: Haymarket Books; 2015.
43. Kail BL, Acosta KL, Wright ER. State-level marriage equality and the health of same-sex couples. Am J Public Health. 2015 Jun; 105(6):1101–5. Epub 2015 Apr 16. DOI: 10.2105/AJPH.2015.302589 [PubMed: 25880959]
44. Gayman M, Barragan J. Multiple perceived reasons for major discrimination and depression. Soc Ment Health. 2013; 3:203–20.
45. Mays VM, Cochran SD. Mental health correlates of perceived discrimination among lesbian, gay, and bisexual adults in the United States. Am J Public Health. 2001; 91:1869–76. [PubMed: 11684618]
46. Seng JS, Lopez WD, Sperlich M, Hamama L, Reed Meldrum CD. Marginalized identities, discrimination burden, and mental health: empirical exploration of an interpersonal-level approach to modeling intersectionality. Soc Sci Med. 2012; 75:2437–45. [PubMed: 23089613]
47. Smedley, BD.Stith, SY., Nelson, AR., editors. Unequal treatment: Confronting racial and ethnic disparities in health care. Washington, D.C: National Academies Press. Institute of Medicine; 2002.
48. Davis, DA., McGlotten, S., editors. Black genders and sexualities. Palgrave Macmillan; 2012 Dec 24.
49. The People Living with HIV Stigma Index. http://www.stigmaindex.org/

Table 1

Participant Characteristics

	People Who Inject Drugs	High-Risk Heterosexuals (Who Do Not inject Drugs)	Men (who do not themselves inject drugs) who have sex with men	p (PWID vs. HRH)	p (PWID vs. MSM)	p (HRH vs MSM)
N (may vary for some rows due to missing values)	300	257	191			
Age						
Mean (p by t-test)	40.9	32.6	25.6	.097	.008	.803
Standard deviation	9.85	11.62	4.41			
Median (p by independent samples median test) (25%-ile, 75%-ile)	41.0 (32.9, 49.1)	28.3 (23.7, 43.9)	25.9 (23.8, 29.7)	<.001	<.001	.001
Women *	44%	48%	NA	.244	NA	NA
Black/African American Race	54%	71%	56%	.000	.7809	.006
Hispanic/Latino Ethnicity	57%	66%	54%	.026	.530	.009
Did not graduate High School or Obtain GED	38%	36.2%	30%	.826	.0756	.1594
Never Married	44%	72%	63%	.000	.000	.0317
Homeless	19%	10%	15%	.0026	.2387	.109
Income < $10,000/year	62%	44%	23%	.00	.000	.000
Self-reported HIV-Positivity	21%	7%	13%	.000	.039	.105
Any military service	19%	12%	18%	.0388	.7241	.1180
Exchanged Sex for Money or Drugs (past 30 days)	22%	26%	26%	.210	.288	.932

* There were also 4 transgender high-risk heterosexuals who are not considered in the statistical comparisons

Note. Injectable drugs are: amphetamine/methamphetamine, heroin/opioids, cocaine/crack.

Table 2

Comparisons between key populations on frequencies of having one's dignity attacked and of observing someone else's dignity being attacked*

	None	1–2 times	3 – 10 times	About once a month	About once or twice a week	Daily or more	Total	p (Linear-by-linear association)**
Having one's dignity attacked								
PWID	49 16.8%	42 14.4%	67 23.0%	52 17.9%	45 15.5%	36 12.4%	291	
HRH	58 22.7%	47 18.4%	50 19.6%	55 21.6%	32 12.5%	13 5.1%	255	.003
Observing someone else have their dignity attacked								
PWID	2 0.7%	18 6.1%	38 12.8%	70 23.6%	66 22.3%	102 34.5%	296	
HRH	13 5.1%	26 10.2%	53 20.8%	27 10.6%	45 17.6%	91 35.7%	255	.010
Having one's dignity attacked								
HRH	58 22.7%	47 18.4%	50 19.6%	55 21.6%	32 12.5%	13 5.1%	255	
MSM	11 5.8%	24 12.6%	54 28.4%	83 43.7%	18 9.5%	0 0%	190	.002
Observing someone else have their dignity attacked								
HRH	13 5.1%	26 10.2%	53 20.8%	27 10.6%	45 17.6%	91 35.7%	255	
MSM	0 0%	1 0.5%	14 7.3%	55 28.8%	87 45.5%	34 17.8%	191	.002
Having one's dignity attacked								
PWID	49 16.8%	42 14.4%	67 23.0%	52 17.9%	45 15.5%	36 12.4%	291	
MSM	11 5.8%	24 12.6%	54 28.4%	83 43.7%	18 9.5%	0 0%	190	.962
Observing someone else have their dignity attacked								
PWID	2 0.7%	18 6.1%	38 12.8%	70 23.6%	66 22.3%	102 34.5%	296	
MSM	0 0%	1 0.5%	14 7.3%	55 28.8%	87 45.5%	34 17.8%	191	.413

* The questions asked were:

- In the last year, how often have people spoken or acted towards you in a way that felt like they were attacking your dignity or demeaning you?
- In the last year, how often have you been present when someone spoke or acted towards someone else in a way that attacked their dignity or demeaned them?

** Linear-by-linear association tests compare differences for ordinal variables (Agresti, 2002, p. 369–373).

Table 3

Perceived Reasons for Dignity Denial

	People Who Inject Drugs	High-Risk Heterosexuals (Who Do Not inject Drugs)	Men (who do not themselves inject drugs) who have sex with men	p (PWID vs. HRH) (p's by chi-square unless otherwise specified)	p (PWID vs. MSM) (p's by chi-square unless otherwise specified)	p (HRH vs MSM) (p's by chi-square unless otherwise specified)
N (may vary for some rows due to missing values)	242	197	179			
My drug use	93%	40%	30%	<.001	<.001	.044
The way I use drugs	77%	10%	4%	<.001	<.001	.036
My personality	7%	25%	18%	<.001	<.001	.131
The way I look	28%	29%	54%	.831	<.001	<.001
My clothing	15%	33%	33%	<.001	<.001	.994
Not having a job	32%	56%	32%	<.001	.899	<.001
Lack of education	7%	26%	9%	<.001	.276	<.001
Being a single parent	3%	14%	0%	<.001	.022 (Fisher's exact test)	<.001
People I hang out with	45%	53%	47%	.102	.679	.260
People I have sex with	16%	31%	56%	<.001	<.001	<.001
Everything about me	4%	2%	3%	.350	.587	.758
My race	6%	10%	18%	.055	.016	<.001
My gender	1%	0%	10%	.127 (Fisher's exact test)	<.001	<.001
My sexual orientation	7%	4%	58%	.104	<.001	<.001
My weight (fat or skinny)	21%	13%	9%	.019	.134	<.001
My personal hygiene	10%	1%	4%	.00	.084	.019
The way I speak	4%	8%	28%	.064	<.001	<.001
How I earn my money	20%	26%	11%	.083	<.001	.007
Being poor	8%	12%	3%	.066	<.001	.019
Being over-educated	2%	0.4%	0%	.223 (Fisher's exact test)	1.000 (Fisher's exact test)	.162 (Fisher's exact test)
Being dumb	5%	2%	2%	.050	1.000 (Fisher's exact test)	.104

	People Who Inject Drugs	High-Risk Heterosexuals (Who Do Not inject Drugs)	Men (who do not themselves inject drugs) who have sex with men	p (PWID vs. HRH) (p's by chi-square unless otherwise specified)	p (PWID vs. MSM) (p's by chi-square unless otherwise specified)	p (HRH vs MSM) (p's by chi-square unless otherwise specified)
Having children from different men	7%	9%	4%	.334	.029	.155
My housing situation	23%	14%	11%	.004	.466	.001
The neighborhood where I live	1%	3%	2%	.241 (Fisher's exact test)	.522	.717 (Fisher's exact test)
My HIV or HCV status	13%	5%	7%	<.001	.315	.023

Table 4

Perpetrators of dignity denial upon participants

Participants were asked: “Please tell me who are the people and/or groups who have attacked your dignity or demeaned you in the way that hurt you the most (circle all that apply).” We provided them a list of 41 categories of such potential attackers for them to choose among.

Categories that were endorse by more than 10% of at least one key population are included. Categories that did not meet this criterion were: Spouse, child, lover, the people I hang out with, teacher, student, fellow inmate, prison guard, priest/rabbi/pastor/imam, fellow drug users, group organizers, therapist, doctor, persons I have sex with for money, NA/AA sponsors, landlord/superintendent

	People Who Inject Drugs	High-Risk Heterosexuals (Who Do Not inject Drugs)	Men (who do not themselves inject drugs) who have sex with men	p (PWID vs. HRH) (p’s by chi-square unless otherwise specified)	p (PWID vs. MSM) (p’s by chi-square unless otherwise specified)	p (HRH vs MSM) (p’s by chi-square unless otherwise specified)
N (may vary for some rows due to missing values)	300	260	191			
Mother	41%	18%	15%	<.001	<.001	.243
Father	13%	5%	14%	<.001	.845	.002
Brother	24%	11%	21%	<.001	.571	.002
Sister	29%	11%	15%	<.001	<.001	.189
Ex-spouse	13%	11%	8%	.417	.076	.297
Ex-lover	13%	18%	16%	.097	.268	.683
Other relatives	21%	24%	22%	.414	.863	.578
Best friend						
Friends	10%	12%	9%	.550	.743	.399
Neighbors	5%	11%	30%	.005	<.001	<.001
Boss or employer at work	11%	8%	20%	.182	.004	<.001
Boss or employer at work (among those 60 with full time or part-time jobs)	*43%*	*17%*	*31%*	*.001*	*.125*	*.041*
Co-Workers	7%	4%	21%	<.001	<.001	<.001
Co-workers (among respondents with full-time or part-time jobs)	*27%*	*11%*	*34%*	*.024*	*.311*	*.001*
“Fellow gays”	1%	0%	14%	<.001	<.001	<.001
Drug dealer	15%	7%	10%	.003	.149	.180
Counselor/Social Worker	9%	16%	3%	.007	.005	<.001
Probation/Parole Officer	5%	10%	9%	.016	.056	.737

	People Who Inject Drugs	High-Risk Heterosexuals (Who Do Not inject Drugs)	Men (who do not themselves inject drugs) who have sex with men	p (PWID vs. HRH) (p's by chi-square unless otherwise specified)	p (PWID vs. MSM) (p's by chi-square unless otherwise specified)	p (HRH vs MSM) (p's by chi-square unless otherwise specified)
Police Officer	12%	16%	25%	.242	<.001	.014
Storeowner	11%	8%	27%	.314	<.001	<.001
Strangers	19%	13%	53%	.078	<.001	<.001
Hospital or clinical staff	13%	7%	14%	.027	.719	.018
Program Staff/Case Manager	18%	17%	6%	.296	<.001	<.001
Security guards	11%	8%	7%	.296	.216	.770

Table 5

Comparisons among people who inject drugs (PWID), high-risk heterosexuals (HRH) and men who have sex with men (MSM) on how they react when their dignity is attacked *

	Never	Rarely	Sometimes	Often	Very often	Number of cases	p (PWID vs. HRH) p (Linear-by-linear association))	p (PWID vs. MSM) p (Linear-by-linear association)	p (HRH vs MSM) p (Linear-by-linear association)
I tell them off							<.001	<.001	.011
PWID	25%	19%	40%	8%	8%	248			
HRH	7%	16%	46%	24%	7%	200			
MSM	7%	19%	57%	16%	1%	181			
I cry inside							<.001	<.001	.120
PWID	26%	25%	23%	13%	13%	249			
HRH	49%	21%	24%	3%	4%	191			
MSM	40%	23%	25%	9%	2%	170			
I cry openly							.001	.002	.660
PWID	57%	20%	13%	5%	5%	247			
HRH	73%	10%	15%	1%	1%	190			
MSM	63%	23%	12%	1%	0%	170			
I tried to hurt them physically							.343	.016	.186
PWID	74%	16%	5%	2%	2%	191			
HRH	74%	10%	10%	4%	2%	187			
MSM	57%	26%	15%	2%	1%	168			
I tried to hurt myself physically							<.001	.466	<.001
PWID	61%	18%	10%	6%	5%	192			
HRH	86%	7%	3%	2%	1%	184			
MSM	61%	17%	14%	5%	0%	160			
I shrug it off, pretend I don't care, and do nothing							.348	.884	.264
PWID	6%	5%	24%	26%	39%	249			
HRH	2%	3%	36%	32%	27%	199			

	Never	Rarely	Sometimes	Often	Very often	Number of cases	p (PWID vs. HRH) p (Linear-by-linear association))	p (PWID vs. MSM) p (Linear-by-linear association)	p (HRH vs MSM) p (Linear-by-linear association)
MSM	1%	7%	29%	28%	35%	181			
I use more drugs							<.001	<.001	.260
PWID	16%	21%	36%	10%	17%	248			
HRH	25%	35%	28%	4%	8%	191			
MSM	20%	33%	29%	15%	2%	168			
I use more alcohol							.579	.077	.012
PWID	34%	23%	24%	7%	12%	228			
HRH	26%	33%	31%	4%	6%	194			
MSM	18%	23%	41%	15%	2%	165			
I have more sex							.034	.006	<.001
PWID	68%	21%	6%	3%	2%	173			
HRH	73%	22%	4%	1%	0%	187			
MSM	44%	39%	13%	1%	2%	164			
I think about changing what I do, or what I look like to prove them wrong							<.001	<.001	<.001
PWID	18%	16%	30%	16%	20%	244			
HRH	29%	18%	28%	17%	7%	196			
MSM	47%	16%	28%	8%	2%	173			

* The question asked was: When they attack your dignity, how often do you react in each of these ways? (We ask them to circle each of a list of possible answers)

Table 6

How key socioeconomic variables are related to frequencies of having one's dignity attacked *

Table 6.a. For people who inject drugs (PWID								
	None	**1–2 times**	**3–10 times**	**About once a month**	**About once or twice a week**	**Daily or more**	**Total**	**p (Linear-by-linear association)**
Having one's dignity attacked								
Not currently employed	15%	11%	25%	18%	16%	15%	233	
Currently employed	26%	29%	14%	15%	14%	2%	58	<.001
Currently domiciled	21%	18%	21%	19%	15%	5%	225	
Currently homeless	2%	2%	25%	11%	16%	44%	55	<.001
Income $10,000+	24%	26%	14%	19%	14%	1%	110	
Income less than $10,000	12%	8%	28%	17%	16%	18%	179	<.001
Did not sell sex for money or goods in last 30 days	18%	14%	25%	17%	14%	12%	242	
Sold sex (participant received money/drugs/gifts)	12%	16%	12%	20%	22%	16%	49	.089
Male	22%	14%	19%	19%	12%	13%	164	
Female	10%	15%	23%	18%	16%	12%	127	.163

Table 6b. For high-risk heterosexuals (HRH)								
	None	**1–2 times**	**3–10 times**	**About once a month**	**About once or twice a week**	**Daily or more**	**Total**	**p (Linear-by-linear association)**
Having one's dignity attacked								
Not currently employed	18%	15%	21%	25%	16%	5%	191	
Currently employed	37.5%	28%	16%	12%	2%	5%	64	<.001
Currently domiciled	24%	18%	20%	20%	12%	5%	229	
Currently homeless	8%	20%	16%	32%	16%	8%	25	.058
Income $10,000+	29%	22%	20%	17%	8%	3%	143	
Income less than $10,000	14%	14%	19%	28%	18%	7%	112	<.001
Did not sell sex for money or goods in last 30 days	25%	17%	17%	23%	13%	5%	210	
Sold sex (participant received money/drugs/gifts)	11%	27%	31%	16%	11%	4%	45	.838
Male	23%	16%	21%	20%	12%	7%	129	

Table 6b. For high-risk heterosexuals (HRH)								
	None	1–2 times	3–10 times	About once a month	About once or twice a week	Daily or more	Total	p (Linear-by-linear association)
Female	23%	20%	19%	22%	12%	3%	122	.498

Table 6c. For men who have sex with men (MSM)								
	None	1–2 times	3–10 times	About once a month	About once or twice a week	Daily or more	Total	p (Linear-by-linear association)
Having one's dignity attacked								
Not currently employed	5%	7%	22%	56%	9%	0%	85	
Currently employed	7%	17%	33%	33%	9%	0%	105	.013
Currently domiciled	6%	14%	27%	42%	10%	0%	162	
Currently homeless	4%	4%	36%	54%	4%	0%	28	.514
Income $12,500+	4%	15%	40%	34%	7%	0%	104	
Income less than $12,500	8%	9%	14%	56%	13%	0%	86	.032
Did not sell sex for money or goods in last 30 days	7%	15%	29%	41%	7%	0%	149	
Sold sex (participant received money/drugs/gifts)	0%	2%	27%	54%	17%	0%	41	.001

* The question asked was: In the last year, how often have people spoken or acted towards you in a way that felt like they were attacking your dignity or demeaning you?

For MSM, we used an income cut-off of $12,500 due to MSM sample having higher incomes than the PWID or HRH samples

Table 7

How key socioeconomic variables are related to whether members of key populations increase their drug, alcohol and sex behaviors when their dignity is attacked *

	Never	Rarely	Sometimes	Often	Very often	Number of cases	p (Linear-by-linear association)
a. I use more drugs							<.001
PWID							
Not currently employed	18%	20%	37%	9%	16%	204	
Currently employed	9%	25%	30%	14%	23%	44	.144
Currently domiciled	17%	22%	34%	19%	17%	182	
Currently homeless	13%	16%	38%	13%	29%	55	.247
Income $10,000+	7%	19%	33%	13%	27%	84	
Income less than $10,000	22%	22%	36%	9%	12%	162	<.001
Did not sell sex for money or goods in last 30 days	18%	21%	38%	9%	14%	205	
Sold sex (participant received money/drugs/gifts)	7%	16%	28%	16%	33%	43	.001
Male	20%	20%	28%	11%	20%	134	
Female)	12%	21%	45%	9%	13%	114	.923
HRH							
Not currently employed	21%	37%	32%	4%	6%	153	
Currently employed	42%	29%	10%	5%	13%	38	.328
Currently domiciled	255	36%	27%	2%	8%	167	
Currently homeless	22%	26%	30%	17%	4%	23	.338
Income $10,000+	34%	35%	16%	3%	12%	96	
Income less than $10,000	16%	35%	40%	5%	4%	95	.121
Did not sell sex for money or goods in last 30 days	29%	34%	29%	1%	6%	148	
Sold sex (participant received money/drugs/gifts)	8%	38%	23%	15%	15%	39	<.001
Male	25%	30%	36%	2%	7%	97	
Female)	24%	41%	19%	7%	9%	90	.873
MSM							
Not currently employed	11%	30%	34%	22%	2%	82	
Currently employed	28%	36%	24%	9%	2%	86	.001

	Never	Rarely	Sometimes	Often	Very often	Number of cases	p (Linear-by-linear association)
Currently domiciled	21%	33%	29%	15%	1%	140	
Currently homeless	11%	36%	29%	18%	7%	28	.130
Income $12,500+	26%	39%	24%	10%	1%	88	
Income less than $12,500	12%	27%	35%	21%	4%	80	.001
Did not sell sex for money or goods in last 30 days	24%	32%	27%	17%	0%	126	
Sold sex (participant received money/drugs/gifts)	7%	36%	36%	12%	9%	42	.017
b. I use more alcohol							
PWID							
Not currently employed	34%	21%	26%	6%	11%	186	
Currently employed	33%	31%	14%	7%	14%	42	,978
Currently domiciled	40%	24%	20%	6%	10%	164	
Currently homeless	21%	23%	18%	7%	21%	53	.003
Income $10,000+	32%	25%	15%	7%	20%	80	
Income less than $10,000	36%	23%	28%	6%	7%	146	.105
Did not sell sex for money or goods in last 30 days	38%	23%	25%	5%	9%	185	
Sold sex (participant received money/drugs/gifts)	16%	26%	21%	14%	23%	43	<.001
Male	38%	20%	22%	7%	12%	125	
Female)	29%	27%	26%	6%	12%	103	,600
HRH							
Not currently employed	21%	32%	36%	4%	6%	156	
Currently employed	45%	37%	10%	3%	5%	38	.005
Currently domiciled	24%	35%	32%	2%	6%	170	
Currently homeless	35%	22%	22%	17%	4%	23	.920
Income $10,000+	32%	39%	17%	3%	8%	97	
Income less than $10,000	20%	27%	44%	5%	4%	97	.049
Did not sell sex for money or goods in last 30 days	29%	34%	31%	1%	4%	151	
Sold sex (participant received money/drugs/gifts)	13%	31%	28%	13%	15%	39	<.001
Male	23%	29%	40%	2%	6%	98	
Female)	28%	39%	21%	5%	6%	92	.314

	Never	Rarely	Sometimes	Often	Very often	Number of cases	p (Linear-by-linear association)
MSM							
Not currently employed	8%	17%	52%	19%	2%	82	
Currently employed	28%	29%	30%	11%	2%	83	<.001
Currently domiciled	20%	23%	41%	14%	1%	138	
Currently homeless	11%	22%	41%	18%	7%	27	.118
Income $12,500+	26%	28%	34%	12%	1%	86	
Income less than $12,500	10%	18%	49%	19%	4%	79	.001
Did not sell sex for money or goods in last 30 days	23%	24%	37%	15%	1%	123	
Sold sex (participant received money/drugs/gifts)	5%	19%	55%	14%	7%	42	.004
c. I have more sex							
PWID							
Not currently employed	69%	21%	3%	4%	2%	132	
Currently employed	63%	19%	15%	9%	2%	41	.505
Currently domiciled	70%	21%	5%	1%	2%	131	
Currently homeless	57%	22%	8%	11%	3%	37	.027
Income $10,000+	56%	29%	8%	2%	5%	79	
Income less than $10,000	79%	14%	4%	3%	0%	94	.004
Did not sell sex for money or goods in last 30 days	78%	13%	4%	2%	1%	135	
Sold sex (participant received money/drugs/gifts)	32%	47%	10%	5%	5%	38	<.001
Male	72%	17%	5%	3%	2%	98	
Female)	63%	25%	7%	3%	3%	75	.371
HRH							
Not currently employed	69%	25%	5%	1%	0%	150	
Currently employed	89%	11%	0%	0%	0%	37	.012
Currently domiciled	73%	23%	4%	0%	0%	163	
Currently homeless	70%	17%	4%	9%	0%	23	.110
Income $10,000+	77%	21%	1%	1%	0%	95	
Income less than $10,000	68%	24%	6%	1%	0%	92	.115
Did not sell sex for money or goods in last 30 days	75%	21%	3%	1%	0%	145	

	Never	Rarely	Sometimes	Often	Very often	Number of cases	p (Linear-by-linear association)
Sold sex (participant received money/drugs/gifts)	61%	32%	5%	3%	0%	38	.066
Male	75%	29%	4%	1%	0%	95	
Female)	69%	26%	3%	1%	9%	88	.594
MSM							
Not currently employed	37%	44%	16%	1%	2%	82	
Currently employed	52%	34%	11%	1%	1%	82	.070
Currently domiciled	48%	38%	12%	1%	1%	137	
Currently homeless	26%	44%	18%	4%	7%	27	.003
Income $12,500+	51%	34%	13%	1%	1%	85	
Income less than $12,500	38%	39%	13%	1%	2%	79	.186
Did not sell sex for money or goods in last 30 days	50%	38%	10%	2%	0%	123	
Sold sex (participant received money/drugs/gifts)	27%	41%	24%	0%	7%	41	,000

* The question asked was: When they attack your dignity, how often do you react in each of these ways? (We ask them to circle each of a list of possible answers)

Table 8

Within risk group exploratory analysis of correlations within each risk group between dignity attack frequency, reactions to dignity attacks, and selected risk behaviors[1]

A. People who inject drugs				
	Dignity attack variables			
Behavioral variable	**Frequency of having dignity attacked[3]**	**React to dignity attacks by using more drugs**	**React to dignity attacks by using more alcohol**	**React to dignity attacks by having more sex**
React to dignity attacks by using more drugs	.454*	NA		
React to dignity attacks by using more alcohol	.361*	.613*	NA	
React to dignity attacks by having more sex	.217*	.498*	.574*	NA
Any unprotected sex with non-main partner	.040 1.06 (.88, 1.28)	.214* 1.18 (.90, 1.54)	.263* 1.27 (1.0, 1.63)	.380* 2.04 (1.17, 3.57)
Any sex partner[2]	.048 1.04 (.89, 1.23)	.146* 1.04 (.83, 1.32)	.133* 1.07 (.86, 1.34)	.229** 1.41 (.87, 2.30)
More than one sex partner[2]	.029 1.04 (.86, 1.27)	.278** 1.35 (1.02, 1.80)	.197** 1.13 (.87, 1.45)	.316** 1.42 (.91, 2.22)
Any exchange sex	.138* 1.26 (1.04, 1.54)	.323* 1.75 (1.29, 2.36)	.398* 1.80 (1.36, 2.38)	.483* 6.31 (2.65, 15.03)
Had sex at a group sex event	−.041 .88 (.68, 1.13)	.256* 1.68 (1.12, 2.52)	.205* 1.25 (.90, 1.72)	.434* 2.11 (1.24, 3.58)
Any receptive syringe sharing	.285* 1.67 (1.33, 2.11)	.177 1.04 (.78, 1.39)	.325* 1.49 (1.15, 1.93)	.197* 1.16 (.76, 1.77)
Any distributive syringe sharing	.226* 1.42 (1.17, 1.72)	.142** .97 (.75, 1.26)	.314* 1.42 (1.12, 1.80)	.201* 1.17 (.78, 1.76)

B. High risk heterosexuals				
	Dignity attack variables			
Behavioral variable	**Frequency of having dignity attacked[2]**	**React to dignity attacks by using more drugs**	**React to dignity attacks by using more alcohol**	**React to dignity attacks by having more sex**
React to dignity attacks by using more drugs	.364*	NA		
React to dignity attacks by using more alcohol	.482*	.769*	NA	
React to dignity attacks by having more sex	.235*	.387*	.420*	NA
Any unprotected sex with non-main partner	−.136* .76 (.62, .94)	.149* 1.54 (1.15, 2.06)	.141* 1.45 (1.07, 1.95)	.058 1.23 (.73, 2.08)
More than one sex partner[2]	−.003 .95 (.80, 1.14)	.192* 1.45 (1.10, 1.92)	.258* 1.71 (1.27, 2.31)	.184* 1.94 (1.12, 3.37)
Any exchange sex	.108 1.18 (.97, 1.44)	.288* 1.66 (1.23, 2.22)	.315* 1.85 (1.36, 2.52)	.185* 1.67 (1.00, 2.78)
Had sex at a group sex event	−.016 .94 (.74, 1.20)	.134* 1.45 (1.03, 2.03)	.159* 1.53 (1.08, 2.17)	.124 1.65 (.90, 3.00)

C. Men who have sex with men				
	Dignity attack variables			
Behavioral variable	**Frequency of having dignity attacked**	**React to dignity attacks by using more drugs**	**React to dignity attacks by using more alcohol**	**React to dignity attacks by having more sex**
React to dignity attacks by using more drugs	.183*	NA		
React to dignity attacks by using more alcohol	.235*	.805*	NA	
React to dignity attacks by having more sex	.133	.515*	.550*	NA
Any unprotected sex with non-main partner	−.074 .95 (.69, 1.31)	.287* 1.81 (1.28, 2.56)	.212* 1.47 (1.05, 2.06)	.097 1.21 (.83, 1.77)
Number of sex partners[2]	−.263** −.64 (−1.05, −.24)	.294** .76 (.36, 1.16)	.186* .51 (.09, .94)	.167* .64 (.14, 1.15)
Any exchange sex	.222* 1.67 (1.12, 2.47)	.323* 1.80 (1.26, 2.58)	.357* 1.95 (1.33, 2.86)	.371* 2.30 (1.49, 3.56)
Had sex at a group sex event	.088 1.43 (.97, 2.13)	.256* 1.70 (1.18, 2.46)	.189* 1.52 (1.05, 2.23)	.234* 1.81 (1.19, 2.77)

[1]Cell entries are Pearson's correlations. An * indicates that the parameter has $p < .05$, and ** indicates $p < .01$. For selected cells, multivariate logistic regressions were run controlling for Age, Race/Ethnicity (Non-Hispanic White vs. other), and (for PWID and HRH) sex. In these cells, in addition to r, the adjusted odds ratio and 95% confidences intervals are also given. For MSM, the regression coefficients and confidence intervals are from linear regression since the dependent variable is continuous.

[2]For analyses of sex partner numbers, different ways of categorizing these were used for the different risk groups based on the distributions in the sample. For PWID, the reference group is those who reported having no sex partners, and the other categories are one sex partner and more than one sex partner. For high-risk heterosexuals, we dichotomized into more than one sex partner vs. one or zero partners. Correlations are not given for this set of variables this the underlying variable on number of partners is a trichotomy. For MSM, we used the number of sex partners they reported.