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Chronic Stress among Latino Day Laborers

Abstract

Latino day laborers endure many hardships as they struggle to adjust as an immigrant community in the United States. This study sought to identify the extent of chronic stress reported by day laborers and the factors associated with stress. 725 Latino day laborers were interviewed. The most reported sources of stress were having immigration-related problems, not having enough money to cover basic needs, having no savings and having work hours change for the worse. Higher chronic stress was associated with homelessness (p < .001) and HIV-related risk behaviors in the previous twelve months (p < .05). In addition, chronic stress was found to be higher among respondents reporting incomes of \$5,000 to \$10,000 (p = 0.007) and still higher among respondents reporting incomes greater than \$10,000 (p < 0.001) compared to those in the lowest income level. Lower chronic stress was associated with having a partner (p < .05) or being single (p = .001) compared to being married. Addressing the stress experienced by day laborers is necessary to prevent potential negative health and mental health consequences among this population.

Key Words

Latinos, day laborers, immigrants, chronic stress

Chronic Stress among Latino Day Laborers

Introduction

Latino day laborers have been described as being a "structurally vulnerable population," suggesting that their difficult living situation in society is the result of specific global, economic, and political conditions beyond their control (Organista et al., 2013). Day workers seek jobs primarily through informal locations, such as standing in front of businesses, home improvement stores, gas stations and on busy streets (Valenzuela, Theodore, Melendez, & Gonzalez, 2006). Day labor work can be very precarious and contribute to the stress experienced by a population already struggling to adjust as a mostly immigrant community in the United States. Chief among the struggles experienced by Latino day laborers is the need to obtain sufficient income for their families and themselves.

Ethnographic studies conducted with Latino day laborers reveal that most day laborers report coming to the US to financially support their families in their countries of origin (Walter, Bourgois, & Loinaz, 2004; Walter, Bourgois, Loinaz, & Schillinger, 2002). They are oftentimes the sole providers to their families (Nelson, Schmotzer, Burgel, Crothers, & White, 2012). In addition, many borrow money from friends or relatives to cover their transit costs and, as a result, may spend their first few months after arrival repaying their debts (Walter et al., 2004; Walter et al., 2002). Given their focus on earning enough money to send home to their families, day laborers endure hardships (Walter et al., 2004) that include homelessness and high-density shared housing with other men in order to save on housing costs (Nelson et al., 2012).

Day labor work itself can also pose many challenges for those relying upon it as a source of income. In a sample of 217 Latino urban day laborers in San Francisco, the participants

reported being successful only about one third of the time in securing work on the days that they sought employment (Nelson et al., 2012). In addition, day labor work is often brief (Duke, Bourdeau, & Hovey, 2010), resulting in the need to continually be in the search for new employment opportunities. This situation makes day laborers particularly vulnerable economically when considering that most day laborers rely on their day labor work as their only source of income, and most are at or below the federal poverty level (Valenzuela et al., 2006). Violations of day laborers' rights, such as not being paid for their work, working under hazardous conditions and receiving insults from employers also occur (Negi, 2011; Nelson et al., 2012; Valenzuela et al., 2006). Day laborers also experience a high degree of risk for work-related injuries from their jobs (Walter et al., 2002).

In addition to negative working conditions, other factors contribute to the vulnerable situation of Latino day laborers. Given that the majority of Latino day laborers are undocumented residents (Valenzuela et al., 2006), this makes them particularly vulnerable in the present political situation in the United States. They may be subject to deportation based on current federal immigration policy. In addition, there exists a climate of xenophobia against immigrants which contributes to experiences of discrimination against them (Duke et al, 2010). An example of this is being treated with suspicion by police authorities (Negi, 2011).

Discrimination also takes the form of being victimized by others. The criminal victimization of Latino day laborers has been described as being an increasing but yet often underreported phenomenon (Negi, Cepeda, & Valdez, in press). In response to such forms of discrimination, many day laborers may choose to intentionally socially isolate themselves in order to avoid encountering experiences of hostility from others (Negi, 2011).

These negative experiences can affect the health and mental health of Latino day laborers. For example, over half of 217 day laborers interviewed for a study in San Francisco described their health status as fair or poor (Nelson et al., 2012). Hopelessness and sadness are also prominent in the lives of such workers (Negi, 2011). Negative mental health consequences are often associated with discriminatory experiences from others. For example, in a study of 150 Latino day laborers, discrimination and stigma associated with one's ethnicity was found to be related to psychological distress and social isolation (Negi, 2013). Higher levels of discrimination and social isolation were both associated with more psychological distress.

Not surprisingly, a large percentage of Latino day laborers report experiencing stress in their lives. Among 102 day laborers interviewed in San Francisco, 57.8% reported high rates of work-related stress (Duke et al., 2010). Additionally, in a study of 30 Latino day laborers in Seattle, stress associated with work, personal finances and everyday discrimination was found to place day laborers at risk for high allostatic load (a measure of the physiologic effects of chronic stress) (de Castro, Voss, Ruppin, Dominguez, & Seixas, 2010).

Examining the issue of stress among Latino day laborers is important because stress-provoking situations are unequally distributed among groups based on their different social positions in society (Pearlin, 1991), making some groups more vulnerable than others to certain types of stressors. In addition, it is also important to examine which subpopulations among vulnerable groups experience more stress. Some preliminary work on this topic among Latino day laborers has been conducted.

In a study of 102 Latino day laborers in Northern California, day laborers who were married or living as married reported higher levels of stress than those who were not (Duke et al, 2010). Those with children under the age of 18 years reported more stress than those who had no

children. No other sociodemographic variables were found to be associated with stress. In a smaller study of 30 Latino day laborers in Seattle, no statistical differences were found in the stress scores of all of the work-related (e.g., years working as a day laborer), economic (e.g., available financial resources) and social stress (e.g., discrimination) indicators measured (de Castro et al., 2010). This may have been due to the small sample size used by the study.

The present study sought to contribute to the literature on stress experienced by Latino day laborers by identifying the extent of stress reported by them and the factors associated with stress among day laborers. Furthermore, it utilized a larger sample of day laborers than those used previously in other studies. It also incorporated a random selection of the participants recruited into the study with the hope that the generalizability of the results would be improved. Information on stress and the factors associated with stress among Latino day laborers can be of use to agencies and providers of services working with this population.

Method

Identifying Day Labor Sites

This study was part of an overall research project examining the HIV testing behaviors and HIV-related risk behaviors of Latino day laborers. For Phase 1 of the study, we began by developing a list of day labor sites, guided by the approaches described by Valenzuela (2000) and MacKellar et al. (2007). For this purpose, we used the Service Planning Areas (SPAs) of Los Angeles County. SPAs are the geographical areas used by the Los Angeles County government in planning services for the population. We used SPAs 4 (Metro Los Angeles), 6 (South), 7 (East) and 8 (South Bay). These areas were chosen because 73% of all male Latino HIV/AIDS cases have been identified in these SPAs (HIV Epidemiology Program, Los Angeles County

Department of Public Health, 2011) and also because of their geographical proximity to the research partner organizations involved in the project.

We identified known day labor sites on a large wall map of Los Angeles County. For any apparent gaps (large geographical areas) where day labor sites had not been identified, we drove to these in the early morning to look for other day labor sites. We also identified through telephone directories all home improvement stores, lumber yards, etc., where day laborers could likely gather and then visited all of them to determine whether day laborers actually congregated there. A universe of all known day laborer sites in these four SPAs was then created.

Determining the Sites with the Largest Number of Day Laborers Reporting High-risk Activities in Phase 1 of the Study

After we identified the universe of all known day laborer sites in these four SPAs, we determined which of these sites contained the largest number of day laborers reporting high-risk sexual and substance-using activities (Phase 1 of the study). Depending on the type of high-risk behavior under consideration in different studies of Latino day laborers or migrants in California, estimates of the number who have screened positive for that behavior or related indicator have ranged from less than one percent (i.e., syphilis; Wong et al., 2003) to 72% (i.e., defined as "medium-high" and "high" risk using very broadly defined sexual risk behaviors with women; Ehrlich, Organista, & Oman, 2007). Other estimates have fallen in between these two broad ranges (Denner, Organista, Dupree, & Thrush, 2005; Organista, & Kubo, 2005; Sanchez et al., 2004).

Given this variability in the estimates of high-risk activities among Latino day laborers or migrants based on different criteria of what defines "high-risk" activities, we developed our own

screening instrument for measuring "high-risk activities" for this particular population. Topics included recent unprotected sex with someone of unknown HIV-positive status, sex under the influence of intoxicants, etc. Each activity on the list was then ranked as being either "high-risk," "some risk" or "no-risk." In determining the final items for our screener, we eliminated all activities ranked by all of us as being "no risk." The remaining items were then assessed as being "high-risk" or "some risk." An example of a high-risk behavior was "had unprotected anal sex with a man"; an example of a moderate level risk behavior was "had sex while high or intoxicated." We then reduced the number of total items in order to shorten the screener. We subsequently used this screener in Phase 1 to identify those sites with the largest number of day laborers reporting high-risk activities; we were also able to determine the sites with the largest number of day laborers reporting "some risk" activities. We visited these sites at randomly selected times and randomly sampled 15% of the individuals who were present when we arrived.

The participant inclusion criteria were the following: Latino ethnicity, male gender and age 18 years or older. An implied informed consent form was administered. The study interview lasted less than fifteen minutes, and the participants received \$5 in cash for completion of the interview. The Institutional Review Boards of the Los Angeles County Department of Public Health and Charles R. Drew University of Medicine and Science provided approval for the study.

A total of 300 individuals were interviewed for the first phase of the study. Among the original 62 day labor sites visited during this part of the study, a total of 31 were identified for the next stage of the project, Phase 2. These included twelve sites where the participants reported high levels of risk behaviors and an additional 19 where moderate levels of risk behaviors were reported.

Sampling Plan for Study Recruitment in Phase 2

For Phase 2 of the study, a sampling unit of "site-day" was calculated where "site" referred to the day labor site and "day" to the day of the week. Sampling units with a very small attendance were excluded from the study. The sampling plan for the study recruitment involved the following stages: the monthly random selection of the day labor sites, the monthly random selection of the sampling units and the random selection of participants at the day labor sites. The enrollment of individuals for this second phase of the study occurred between March 2011 and January 2012. We developed an alpha-numeric "metric" consisting of a combination of numeric and letter indicators to be used during data analysis to identify possible repeaters. This metric consisted of the participant's father's initials, mother's initials and the participant's year of birth.

Measures

Chronic stress. Chronic stress was assessed using the chronic burden scale of Gurung et al. (2004). This 21-item scale was chosen because many of its individual items address concerns that would be relevant for a population of Latino day laborers, e.g., insufficient money to meet the basic needs of life, insufficient savings, being laid off from work, work hours that change for the worse, being a victim of a crime, immigration problems, residence in a high-crime area, discrimination because of one's nationality and housing problems. In addition, it includes generic items reflective of stress that anyone could experience (e.g., transportation, housing, divorce/separation, unresolved conflict with someone important).

Each question had four possible responses: 1. Not a problem for me in the last month; 2. A little bit of a problem for me in the last month; 3. Somewhat of a problem for me in the last

month; and, 4. A major problem for me in the last month. The possible range of scores was from 21 to 84 with a higher score being indicative of higher chronic stress. The scale was found to have a Cronbach's alpha reliability score of 0.651 for the present sample.

Sociodemographic data. All participants were asked for sociodemographic information (such as age, educational level, previous year's income, use of Spanish and English languages, country of birth, relationship status, length of time in the United States, legal residency status, sexual orientation and whether they had been homeless in the previous twelve months). In addition, participants reported the number and gender of their sexual partners in the previous twelve months (this question was asked only of those who reported having been sexually active during that period). Participants were also asked a series of HIV-related risk behavior questions, such as whether they had engaged in any penetrative anal sexual activity with a man without a condom in the previous twelve months or having had any sexually transmitted disease in the previous 12 months.

The study questionnaire was interviewer-administered. Participants in this second phase of the study were administered a full consent form for their approval and signature. Participants were compensated with a \$20 gift card.

Statistical Analysis

Descriptive statistics were obtained for all the main study variables. To examine the bivariate associations between chronic stress and the various socio-demographic variables, Pearson correlation tests were used. Variables that were associated with chronic stress at the bivariate level at p < 0.20 (Hosmer & Lemeshow 1989, 86) were included in the final multivariate regression model predicting chronic stress. In addition, multicollinearity statistics (i.e., tolerance

and variance inflation factors [VIF]) were obtained to examine the extent to which the independent variables in the final model were correlated with each other.

Results

A total of 725 Latino day laborers participated of the 2,064 approached. Based on an examination of the alpha-numeric "metric" described above in the Measures section which was developed to identify possible repeaters in the study, we discovered that no individual had participated more than once in the project.

The mean age for the sample was 38.5 years (SD = 8.4). Over 40% had a sixth grade education or less; an additional 29% reported having had up to an additional two years of education. Seventy percent reported an income of \$10,000 or less in the previous year. A slight majority (55%) spoke only Spanish. Mexico (55%) was the country most reported as the nation of origin, followed by Guatemala (25%) and El Salvador (15%). Forty percent were single, 28% reported having a partner, and 26% were married. Of the 188 men who reported being married, 59% stated that their spouse lived with them in the US, while 41% reported that they did not. Years lived in the US were almost equally divided between less than ten years (49%) and ten or more (51%). Almost all of the participants described their residency status as being undocumented (94%) and their sexual orientation as heterosexual (96%). Half reported having had one sexual partner in the previous twelve months; an additional third reported two or more partners during that same time period. Almost all (97%) reported having had only women as their sexual partners. Additionally, almost all (96%) reported having engaged in no HIV-related sexual risk behaviors in the previous twelve months. Seven percent reported having been homeless during that same period.

Chronic stress had a mean score of 37.2 (SD = 6.08) and an actual range of 21 to 66. The individual respondent scores for this measure approximated a normal distribution requiring no transformation for statistical analysis. The items with the highest scores were the following: having immigration-related problems (M = 3.53; SD = 1.009); not having enough money to cover basic needs (M = 3.47; SD = 0.834), having no savings (M = 3.46; SD = 0.842) and having work hours change for the worse (M = 3.26; 1.125). Other items which had lower scores included the following: having housing problems (M = 1.64; SD = 0.951), experiencing divorce or separation from partner (M = 1.28; SD = 0.755); experiencing discrimination (M = 1.24; SD = 0.661); experiencing a serious accident, illness or new injury (M = 1.16; SD = 0.565); and being the victim of a crime or physical assault (M = 1.05; SD = 0.315)

Table 1 provides the results of the multivariate model of chronic stress. Higher chronic stress was associated with homelessness in the previous twelve months, both higher income levels compared to the lowest income category of less than \$5,000, and having engaged in HIV-related risk behaviors in the previous twelve months. Lower chronic stress was reported by individuals who had a partner or were single compared to those who were married.

[Table 1 here]

Discussion

Overall, the chronic stress mean score was unexpectedly low considering the gravity of the living circumstances of day laborers, e.g., mostly undocumented immigrants, largely marginally employed. The scale used in this study included both generic items reflective of stress that anyone could experience as well as items specific to a migrant population. The utility of the scale used in this study was reflected by the fact that every item of the scale had affirmative

responses by at least some individuals in the sample, albeit in varying amounts. Nonetheless, if a different scale had been selected for measuring chronic stress, the scores obtained could have been higher relative to the scores obtained from the scale used in this study.

Given that almost all of the participants described their residency status as being undocumented, not surprisingly the most mentioned problem related to chronic stress was having immigration-related problems. This was followed closely by not having enough money to cover basic needs, having no savings and having work hours change for the worse. These findings are consistent with national data reported by Valenzuela et al. (2006) who found that the work instability that day laborers experience in day labor was significant. This, along with low monthly earnings, places them among the "working poor" of the nation.

Higher chronic stress was associated with having been homeless in the previous twelve months, which was reported by seven percent of the sample. Homelessness in this sample was in the low range compared to other studies of Latino day laborers where homelessness has ranged from 4.9% to 25.5% (Duke et al., 2010; Organista & Kubo, 2005; Wong, Tambis, Hernandez, Chaw, & Klausner, 2003). Our finding of the association between chronic stress and homelessness is consistent with previous research among Latino day laborers which has found homelessness to be associated with the stress of feeling instable (Duke et al., 2010). Such instability is characterized by the feeling of being often on the move and not settled, feeling isolated and finding it hard to meet people, defining one's housing situation as being inadequate to one's needs and experiencing stress related to having no stores nearby for shopping.

Both higher income levels (\$5,000 to \$10,000 and greater than \$10,000) were associated with more chronic stress compared to the lowest income category (less than \$5,000). This result was not anticipated, as one would have expected that having the lowest income level would have

been associated with higher stress compared to having higher income levels (Cummins, 2000; Schulz et al., 2012). Other literature, however, provides support for such counterintuitive results. It could be that those with higher incomes reported more chronic stress compared to those in the lowest income category because the very fact of obtaining a higher income may have been associated with stress that came with wanting to achieve one's goals (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2006). Further research with Latino day labor populations should examine the extent to which this may have been the reason for the association that was found between higher income levels and more chronic stress.

Higher chronic stress was also found to be associated with having engaged in HIV-related risk behaviors in the previous twelve months. This is consistent with previous research with Latino immigrant men and other populations which has found sexual and other risk behaviors to be associated with reports of stress in one's life. For example, increased stress among immigrant Latino men recently arrived to the US has been found to be related to sexual risk behaviors (Rhodes et al., 2009). Such associations between stress and sexual risk behaviors are documented as well among other populations. For example, among HIV-positive African American men who have sex with men, experiencing traumatic stress, such as being physically assaulted because of their race, has been associated with greater sexual risk taking (Fields et al., 2013). Programs developed to help Latino day laborers lower their stress may have the additional benefit of helping to decrease risk behaviors among them. This can help them to lead healthier lives, which can also benefit their partners, families and communities at large.

Lower chronic stress was reported by individuals who had a partner or were single compared to those who were married. This association between chronic stress and marital status may be explained by the fact that those who were married may have had more financial

obligations (such as economic obligations to children living back in their home country with their mother) than those who were single or had a partner. Given the importance that Latino day laborers place on their families (Negi, 2011; Nelson et al., 2012; Organista et al., 2013; Walter et al., 2004), it is not surprising that not being able to meet one's financial obligations to one's family would be a source of great stress among day laborers.

One limitation of this study was the large nonresponse rate of the participants recruited into the second phase of the study. This may have been due to different factors. For example, given that the primary focus of the parent study was to examine the HIV testing behaviors and HIV-related risk behaviors of Latino day laborers, participants were initially approached with the offer of an HIV test and/or screenings for other health conditions. Those not interested in such screenings declined participation in the test. It is also possible that participants did not want to risk jeopardizing getting a job offer from a potential employer while engaged in a research study interview for which they would be compensated with only a \$20 gift card. It is also possible that some may have chosen not to participate because of concerns over their undocumented status and worries about what participation in a research project could involve. As a result, the large nonresponse rate prevents us from being able to generalize the results of our study to the wider population of Latino day laborers.

It is also possible that the choice of the chronic stress scale used in this study may have been problematic. The Cronbach's alpha reliability score of the scale was somewhat below 0.70, which is considered to be the minimum acceptable score in social science research (DeVellis, 1991). Using a scale with greater reliability would have provided more confidence in our measure of chronic stress. In addition, as already noted above, using a different scale for measuring chronic stress could have resulted in higher scores relative to the ones obtained with

the scale used in this study. Nonetheless, the use of a scale which included both generic items of stress and ones specific to a migrant population resulted in our being able to examine chronic stress from a broader perspective.

Another limitation was the cross-sectional nature of the research design. Thus we are not able to make any conclusions about causal associations among the variables examined.

Nevertheless, with the large number of day laborers who actually participated in the study, we were able to identify the extent of chronic stress among the day laborers in our sample and some factors associated with this stress. Addressing the stress experienced by day laborers is necessary to prevent potential negative health and mental health consequences among this population.

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Information on Authors

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Table 1. Multivariate Regression of Chronic Stress

| | Unstandardized Coefficients | | Standardized | P | Collinearity | |
|---------------------------|-----------------------------|-------|--------------|-------|--------------|-------|
| Variables | | | Coefficients | | Statistics | |
| | В | SE | β | | Tolerance | VIF |
| (Constant) | 36.99 | 1.26 | _ | 0.000 | | |
| Years Lived in the US | | | | | | |
| Less than 10 years | | | | | | |
| 10 years or more | -0.242 | 0.479 | -0.020 | 0.613 | 0.855 | 1.17 |
| Education | | | | | | |
| None | | | | | | |
| Grades 1 – 6 | -1.596 | 1.109 | -0.126 | 0.151 | 0.173 | 5.792 |
| Grades 7 – 8 | -0.710 | 1.132 | -0.053 | 0.531 | 0.184 | 5.430 |
| Grades 9 – 11 | -0.061 | 1.201 | -0.004 | 0.960 | 0.265 | 3.779 |
| Grade 12/GED/some | | | | | | |
| college/degree | -1.225 | 1.219 | -0.71 | 0.315 | 0.265 | 3.778 |
| Homeless in Past 12 | 3.423 | 0.884 | 0.146 | <0.00 | 0.936 | 1.068 |
| Months | | | | 1 | | |
| Income | | | | 1 | | |
| Less than \$5,000 | | | | | | |
| \$5,000 - \$10,000 | 1.839 | 0.684 | 0.150 | 0.007 | 0.423 | 2.366 |
| Greater than \$10,000 | 3.123 | 0.766 | 0.236 | <0.00 | 0.395 | 2.531 |
| | | | | 1 | | |
| HIV-related Risk | | | | | | |
| Behaviors in Past 12 | 2.859 | 1.245 | 0.087 | 0.022 | 0.927 | 1.079 |
| Months | | | | | | |
| Number of Sexual Partners | | | | | | |
| None | | | | | | |

| One | 0.495 | 0.680 | 0.041 | 0.467 | 0.424 | 2.361 |
|------------------|--------|-------|--------|-------|-------|-------|
| Two | -0.425 | 0.815 | -0.025 | 0.602 | 0.597 | 1.674 |
| Three or more | 1.261 | 0.808 | -0.079 | 0.119 | 0.523 | 1.914 |
| Marital Status | | | | | | |
| Married | | | | | | |
| Partner | -1.451 | 0.615 | -0.107 | 0.019 | 0.642 | 1.559 |
| Single | -2.061 | 0.596 | -0.166 | 0.001 | 0.575 | 1.740 |
| Other | 0.665 | 1.029 | 0.027 | 0.519 | 0.775 | 1.290 |
| Country of Birth | | | | | | |
| Mexico | | | | | | |
| Guatemala | -0.591 | 0.548 | -0.042 | 0.281 | 0.857 | 1.167 |
| El Salvador | -0.456 | 0.658 | -0.027 | 0.489 | 0.873 | 1.145 |
| Other | 0.039 | 1.085 | 0.001 | 0.972 | 0.935 | 1.069 |

⁷²⁵ observations read; 707 observations used.