

Work experiences of Latino building cleaners: An exploratory study

Donald E. Eggerth PhD | Bermang Ortiz MA | Brenna M. Keller MPH  | Michael A. Flynn MA

Education and Information Division, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, Cincinnati, Ohio

Correspondence

Brenna M. Keller MPH, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, 1090 Tusculum Avenue, M/S C-10, Cincinnati, OH 45226.

Email: Bkeller1@cdc.gov

Abstract

Background: There are roughly 3.8 million cleaning workers in the United States. The cleaning workforce is largely composed of women, immigrants, and ethnic minorities who receive low wages and have low education levels. They are exposed to physical, chemical, biological, and psychosocial hazards.

Methods: Qualitative methodology was used to investigate how Latino immigrants experience work as building cleaners. A grounded theory coding approach was used to analyze focus group data from 77 participants.

Results: Three major themes were identified: economic vulnerability, psychosocial stressors, and health and safety effects. Although workers are aware of the safety hazards associated with their jobs, they believe their immigration status limits employment opportunities leading them to accept poor working conditions. They work through injuries and cope psychologically through minimizing negative health impacts and normalizing work-related injuries and illnesses.

Conclusions: The findings suggest that interventions for these workers should recognize the hostile organizational and psychosocial contexts within which immigrants often work.

KEYWORDS

building cleaners, coping, immigrants, Latino, qualitative

1 | INTRODUCTION

According to the US Bureau of Labor Statistics (BLS) in 2016, about 2.4 million people worked as custodians and building cleaners and 1.4 million worked as maids and housekeepers.^{1,2} Cleaning workers are often exposed to physical, chemical, and biological occupational hazards, as well as work organization and psychosocial factors that negatively affect their safety and health.³⁻⁵ Cleaning work, can be physically demanding. Cleaning tasks (eg, mopping, scrubbing, vacuuming, handling trash and furniture, etc.) generally involve awkward postures, exertion of both dynamic and static force, repetitive motions, lifting and carrying of heavy loads, and use of ergonomically inadequate equipment.⁶ These ergonomic hazards place cleaning workers at a high risk of developing work-related

musculoskeletal disorders.^{7,8} Moreover, cleaning workers are vulnerable to respiratory and dermal health problems due to their use of cleaning chemicals.⁴ Studies have shown that exposures to cleaning agents such as acids, alkaline agents, and solvents put workers at an increased risk of asthma and chronic bronchitis and skin issues like dermatitis.^{5,9} Likewise, cleaning workers may be exposed to biological hazards such as bacteria, viruses, and molds. Biological hazards are particularly salient for cleaning workers in the healthcare sector and public spaces where they may encounter blood-borne pathogens through exposure to body fluids and needles.⁶ Additionally, cleaning work is characterized by employment patterns such as: contracting; subcontracting; and precarious, contingent, and informal employment arrangements, which have been shown to have a negative impact on workers' safety and health arising from lack of

training, use of unsafe equipment, and increased workloads.^{5,10,11} Due to the precarious nature of their employment, building cleaners have reported emotional distress arising from ever-increasing work demands and exploitation by employers taking advantage of their immigration status.^{12,13}

The cleaning workforce is largely composed of women, immigrants, and ethnic minorities who are paid low wages and tend to have low education levels.^{5,14–17} Latino workers, and in particular Latina women, make up a significant portion of this workforce.¹⁸ The US Bureau of Labor Statistics (BLS) considers Hispanics or Latinos “persons who identified themselves in the enumeration process as being Hispanic, Latino or Spanish origin,” and who are further classified into the following categories: Mexican, Puerto Rican, Cuban, Central and South American, or other Hispanic or Latino.¹⁹ For this paper, we use Latino in a broad sense. It includes Spanish and Portuguese-speaking people of Latin American origin. In 2017, BLS estimated that 31.7% of custodians and building cleaners and 49.4% of maids and housekeepers were Latino.²⁰ These figures do not account for cleaning workers who work in the informal sector.⁵

Latino workers, and particularly foreign-born Latino workers tend to experience higher rates of occupational fatalities and injuries than their non-Latino counterparts.^{21,22} In 2015, Latino workers accounted for 19% of all fatal occupational injuries and had a higher fatal work injury rate than that of all workers.²³ In the same year, foreign-born Latino workers represented 67% of all fatal work injuries to Latino workers.²³ In 2017, Latinos made up 47.9% of the foreign-born labor force in the United States.²⁴ Immigrants without proper documentation are also more likely to work in the leisure and hospitality sector (18% in 2014) compared with US-born and authorized immigrant workers.²⁵ Immigration status is one important determinant of occupational safety and health.¹³ Buchanan et al.’s²⁶ study of occupational injury disparities in the United States hotel industry indicated that Latino housekeepers were 70% more likely to be injured than white female housekeepers. Similarly, Premji and Krause’s²⁷ study of Las Vegas hotel room cleaners found that work-related health problems were not distributed equally across the workforce. Work-related injury and illness rates were mediated by the workers’ ethnicity, language, and immigrant status. Taken together, the above underscores the importance of thinking about immigration status as a social determinant of safety and health for Latino cleaning workers.

The literature on cleaning work contains many reviews or epidemiological papers^{4,5,9,28–31} identifying the hazards to which cleaners may be exposed and their harmful health effects. There are also a number of qualitative studies^{32–34} exploring the work experiences of Latino building cleaners. The findings of these qualitative studies parallel the findings of the epidemiological papers in that they primarily present a catalog of workplace hazards and the health effects associated with exposure to these hazards. The purpose of this study was to move the focus from workplace hazards to the workers themselves. This study explored Latino building cleaners’ experiences of work, their perceived risks, and barriers to

working safely, and their perception of the impact their job has on their overall health.

2 | MATERIALS AND METHODS

2.1 | Participants and recruitment

Participation in this study was limited to individuals used in cleaning jobs that take place in similar worksites and require similar cleaning tasks and tools. For instance, cleaning in offices, apartment buildings, hotels, homes, hospitals, schools, and public buildings require tasks such as mopping, handling trash, vacuuming, dusting and scrubbing, and moving and lifting objects. Although the scale of the worksites varied considerably, the scope of basic work tasks was the same. Consequently, cleaning occupations that required specialized tools and tasks such as window cleaners or industrial cleaners were not included.

Recruitment of the focus group participants (N = 77) for this study was facilitated by several nonprofit community-based organizations serving the Latino immigrant community. These organizations spread information throughout their memberships regarding participation in this study. The recruitment used a snowballing strategy; once an individual agreed to participate, they were asked to recommend someone else they know who worked as a building cleaner. The inclusion criteria for the focus groups were being an adult (18 years or older) Latino person born outside of the United States who was currently used as a building cleaner in the United States. Compliance with the inclusion criteria was determined by the contractors recruited to assemble the focus groups.

2.2 | Focus group procedure

The 20 focus groups consisting of 77 participants lasted between 1 and 2 hours. At the end of each group, participants were provided a small monetary stipend and given a list of local occupational safety and health resources. The focus groups were assembled and conducted in three locations in the United States: seven in Boston, MA; four in Atlanta, GA; and nine in Oakland/San Francisco, CA. Due to difficulties in recruitment, the average focus group contained three to four participants rather than the anticipated six to nine. Trained, bilingual facilitators conducted all the focus groups. The study was reviewed and approved by the CDC/NIOSH Institutional Review Board.

Participants provided limited general demographic information before the focus groups. No personally identifiable information (such as name, birth date, employer, or immigration status) was collected. Verbal consent was obtained and recorded in lieu of signed written consent as additional protection of anonymity for the participants, as the signed consent form would have been the only identifiable information collected by the study. Native Spanish-speaking or Portuguese-speaking moderators conducted the focus groups in Spanish or Portuguese. Audio recordings were made of the focus groups for transcription. The participants were asked to discuss their

experiences working as building cleaners. Specifically, they were asked:

- To describe where they worked as a building cleaner.
- To describe what they did during a typical workday.
- What equipment they used during a typical workday.
- What cleaning chemicals they used during a typical workday.
- What kinds of personal protective equipment they used—if any—and who provided it.
- To describe their work postures and any repetitive motions.
- To discuss how they typically learn about occupational safety and health.
- How they would rate their health.
- How their health affects their work.
- How their work may have affected their health.
- To describe any work-related injuries or illnesses they had experienced.
- To describe their interactions with managers, supervisors, and employers.
- Any suggestions they had for how their work circumstances could be improved.

2.3 | Data analysis

The audio recordings of the focus groups were transcribed verbatim in Spanish and Portuguese and then summarized into English notes to ensure analytic input from all of the team members. The transcripts (in both Spanish and Portuguese) and the English-language summaries were reviewed and coded independently by the authors of this paper using the grounded theory approach.³⁵ In this approach, the researchers code responses using the themes and patterns that emerge from their reading of the transcripts. Differences in coding were discussed by the raters until a consensus is reached.

A grounded theory approach to coding allows the emergence of themes beyond those anticipated by the focus group script. In some respects, qualitative research can be far more exploratory than some quantitative efforts. The focus group script is the starting point for a conversation. It is expected that repeated across a number of focus groups, this “conversation” would have exhausted the range of topics that could be elicited by this set of talking points. In doing so, it will have delineated the range of the response domain. The coding of responses is simply a data reduction strategy to impose a simpler order on many bits of data. The grouping of responses into themes represents the echoing of thought or sentiment both within and across multiple focus groups.

3 | RESULTS

Participants came from El Salvador, Mexico, Brazil, Guatemala, Nicaragua, Honduras, Colombia, and Peru. Fifteen focus groups were conducted in Spanish and five in Portuguese. All of the Portuguese-speaking focus

groups' participants were Brazilian. These five groups were all held in Boston. A total of 77 individuals participated in the focus groups. The participants reported working as cleaners in office buildings, an airport, apartment buildings, private residences, a grocery store, restaurants, and a nursing home. Most of the participants were female ($n = 59, 77\%$). The average age of the participants was 44.7 years ($SD = 13.1$) with an age range of 19 to 80.

Initial examination of the transcripts and summaries found no substantial differences in the content from either geographic location or nativity. Consequently, the focus group results were merged for final analysis. This analysis identified three major themes: (1) economic vulnerability, (2) psychosocial stressors, and (3) health and safety effects. Each of these themes was further divided into a varying number of subthemes, which are discussed below. Quotes representative of these themes and subthemes are provided. Although a large number of relevant quotes were categorized during the analysis, due to concerns related to length, this paper is limited to those one or two that best illustrate the theme or subtheme being discussed. As was the intention of the study, the emergent themes represented more the perceptions and experiences of the participants of their jobs than an objective description of job activities.

3.1 | Economic vulnerability

Preoccupation with economic stability was a central theme across all groups. Fear of job loss was frequently cited as a reason for not speaking up with employers, taking on multiple jobs, enduring hazardous working conditions, and working through injury or illness. This theme can be further divided into three subthemes: (1) precarious work, (2) unpaid/delayed wages, and (3) excessive workload.

3.1.1 | Precarious work

Economic uncertainty was cited as a major source of stress.

[The owner of the house] gives me \$65 [per cleaning], and I do not tell him to pay me more because I feel that he will fire me ... because they have fired me in other places. He does not even give me [money] for the bus fare. I have no other work.

Many of the participants stated that their status as contingent/nonstandard workers compelled them to accept hazardous or otherwise unpleasant work.

I found work looking after an elderly woman. But her daughter made me do everything around the house...clean everything, under the beds, clean after [the daughter's] kids, husband. It was painful for me because you want to defend yourself and sometimes you have keep quiet when there is no work. As my friends say we have to endure it, because even if it's a little [money] we use it to pay the

rent, support our children. I think they take advantage of us.

3.1.2 | Unpaid/delayed wages

Being paid late or not at all was most frequently mentioned as a concern by participants who worked in private residences, but it was also an important concern for those who work for cleaning subcontractors.

Sometimes you aren't paid on time ... I don't have money laying around to not get paid on time. If he is richer than I am and he is not paying ... what's going on? Last week I had a problem with this. I was counting on this money and he didn't come through.

3.2 | Excessive workload

Many workers reported being overburdened at work. Individuals complained of understaffing, and being asked to do work that was outside the scope of contracts and agreements. It is important to note that it is not clear from the transcripts and recordings whether "contract" referred to a formal written agreement or an informal verbal arrangement.

They give you more work than the amount you agreed on. My contract said that I had to clean 4 bathrooms. And only with the excuse of "you can"—they give you more work.

Some participants felt that they were doing the job of two to three individuals and reported they were not paid for doing extra work.

The heaviest workload falls upon women. I had double duty. I cooked and cleaned [at a restaurant] but the owners didn't care. I still got the same pay [for doing twice the work].

This topic was particularly important for participants who worked cleaning private residences.

I was assigned more work. [The homeowner] forced me to wash her son's clothes. It was not in the contract. I really needed the job. I said, "Oh well, I'll have to wash the clothes." When I finished washing the clothes my back hurt me. Because it was three carts [of clothes] I had to carry. I had to walk two blocks with the cart. I needed to make three trips to carry all the clothes.

3.3 | Psychosocial factors

The theme of psychosocial factors concerns the participants' psychological responses to a range of situations experienced at

home and at work in both private and public settings. The stress of working long or unusual hours was a theme that nearly all participants reported.

Yes, it causes me stress. I have to wake up at 4:30 a.m. and I return home around 3:30 p.m. Working a lot is something that affects you.

This theme can also be divided into four subthemes that reflected the contexts within which these factors occur. These subthemes are: (1) family impact, (2) stress related to management practices, (3) social stigma/dehumanization, and (4) peer-group network. As will be seen in the examples to follow, these are not discrete categories and in some instances, more than one comes into play at the same time.

3.3.1 | Family impact

Almost all of the participants cited responsibility to their family as a major driver of their working long hours and for accepting unsatisfactory working conditions. However, many also reported that the emotional and psychological exhaustion arising from their job(s) severely limited opportunities to have "quality time" with their families.

I can no longer play with my daughter. I come from work tired. Hurt. [My daughter says to me] "Let's play." I have no desire. I have a knee injury.

3.3.2 | Stress related to management practices

The participants reported widespread dissatisfaction with management practices. It was clear that most participants considered the quality of their supervisor as central to having a positive work experience.

It depends on the supervisor if they do anything to make your work easier ... they need to give you the chance to use your own intelligence. Supervisors have to know the abilities of their workers ... know what people need to work in a team or by themselves. Supervisors that listen to you are the good ones. They are the ones who can make your job easier.

Participants reported that many supervisors have poor interpersonal and conflict resolution skills.

[Supervisors] don't know how to treat people. It's worse at night. It's not gratifying when you get screamed at. It's a terrible weight on your mind. Your self-esteem hits rock bottom. It reflects on your kids. It's a stressful situation. Your only motivation is your kids.

Some participants complained of the “take it or leave it” aspect of their jobs.

They tell you “we are going to give this [a lump sum of money] ... you can take 2 hours or 10 hours—it’s up to you” ... They tell you “there’s the job” if wanted and if not “I can always get someone else.”

3.3.3 | Social stigma/dehumanization

Nearly all of the participants expressed outrage that neither their work nor their humanity was valued or respected. Some expressed the desire to simply be appreciated for their labor and to be offered common courtesies.

They don’t even thank you. Sometimes they won’t offer you water.

Many of the participants who worked in public settings reported being treated poorly by customers or passersby.

[What I least like] is the bad mood of the public. The mistreatment you get from people in the airport—I also have feelings!

Many participants attributed their mistreatment to their immigration status.

They kick you if they want just because you’re undocumented. We need to provide for our family here and our family in our country.

3.3.4 | Peer-group network

A positive finding was the satisfaction with social support that the participants experienced interacting with coworkers.

I like working with my girls. When we are in the car, it’s a fun mess. The best part is chatting. Even when we are in the house we end up talking more ... that is the most rewarding part of my work.

Coworkers were important for more than just comradery or emotional support. Peers were reported as the most common source of information about better safety practices, especially among house cleaners.

What I now include in my cleaning is vinegar and soap. Before I used to buy the big bottle of [bleach], now I am using it less and using more vinegar. Because one of my friends told me about it.

3.4 | Health and safety effects

Many of the participants reported having been hurt at work and nearly all knew someone who had been hurt at work. Nearly all of the participants knew of the safety hazards associated with working as a building cleaner. However, as indicated in the themes discussed previously in this paper, most felt constrained to accept whatever hazards came their way. Four health and safety effects subthemes were identified: (1) chemical hazards, (2) ergonomic hazards, (3) normalization of injury, and (4) inconsistent self-appraisal of health. The first two subthemes deal with physical hazards in the workplace. The last two subthemes address the processes by which the participants rationalize being injured on the job.

3.4.1 | Chemical hazards

Many participants complained about the adverse physical effects of using cleaning chemicals that they were required to use on the job. Bleach was frequently mentioned as an undesirable product to clean with.

The supervisors ask us to use a lot of [bleach]. One gets dizzy. It’s very harmful when it comes to cleaning the oven.

The [bleach] affects me. The [glass cleaner] gives me a headache. [Glass cleaner] harms me a lot. My eyes stay red. And sometimes I could not even breathe. The [glass cleaner] feels like it’s inside my body.

Some participants reported attempting to substitute less toxic products.

I try to clean with soap and water. I do not like cleaning a counter with chemicals. I try not to.

3.4.2 | Ergonomic hazards

Participants mentioned many activities that created musculoskeletal problems, but the most frequently cited problem activities involved lifting, bending, and awkward work positions.

I sometimes clean kneeled down. I do not crouch because my back hurts.

Bad positions also affect you ... you have to squat, lift, and move chairs and tables to clean.

3.4.3 | Normalization of injury

Many of the participants seemed to view work-related injuries and illnesses as a natural or inevitable consequence of work. Some

participants appear to define good health as being able to work and bad health as being unable to work.

I am healthy because I am not in a hospital.

I have leg pain. Leg pain is something you get. There's no way for someone who does this type of work to be 100%.

A number of participants reported having to work through an injury.

I sprained my foot, right? I went to work and worked normal.

Some participants reported hiding injuries from employers to avoid the possibility of job loss.

I clean three floors injured. I do not say that I have a problem. I have to work. Physically I don't hold up like I used to before the accident.

3.4.4 | Inconsistent self-appraisal of health

Many participants reported their health status to be good, but responses to follow-up questions regarding how their job affects their health suggested that most had work-related health problems.

[My health is] good because I take painkillers and the pain goes away. I don't take medicines every day, like for high blood pressure because I am healthy.

[My health is] regular, because I have lower back spasms and lumbar pain.

These responses clearly overlap with the subtheme of *normalization of injury*, but occurred with enough frequency to merit consideration as an independent subtheme.

4 | DISCUSSION

Findings indicate that Latino cleaning workers are exposed to physical, chemical, and psychosocial hazards in the workplace that has an adverse effect on their safety and health. The subthemes concerning *chemical hazards* and *ergonomic hazards* are consistent with both the quantitative and the qualitative literature cataloging the occupational hazards of building cleaners. The findings of this study go beyond occupational hazards and explore the social and behavioral context within which the building cleaners work. Consistent with the findings of Flynn et al.,¹³ documentation status appeared to be a significant factor related to how these workers understood their circumstances. Also consistent with this study,

documentation status was conceptualized as the backdrop against which all the other themes explored in this study were played out. Therefore, for the sake of brevity, no separate section is devoted to documentation status. Suffice it to say that documentation status was perceived by the participants as not only limiting employment opportunities but also limiting responses to safety and health hazards and questionable management practices. Very often, the response was to say nothing and to work through injury.

The findings of this study suggest that in addition to any work-related physical health problems these cleaners may have, they also suffer psychologically. As was suggested in the subtheme *family impact*, the price of being able to provide economically for one's family is to be unavailable emotionally—with attendant feelings of having failed one's family. The findings in the subtheme *social stigma/dehumanization* relate both the indignation felt and the demoralization experienced by these workers due to a lack of regard from employers and the public that they experience for both their work and themselves. Gainful employment is often the central motivation behind Latin American immigration to the United States, and as such, immigration can be understood as a career choice.³⁶ The impact of this career choice on the health of the immigrant workers and their families goes beyond the risks and conditions they face at work. Immigrating for work requires individuals and their families to insert themselves in an entirely new social setting and context that can impact their physical, emotional, and social health. Under the best of circumstances, immigration often requires a total change in lifestyle that can result in acculturative stress and social isolation.³⁷ As the quotes from this study demonstrate, experiences of discrimination and exploitation can make this already stressful transition even more stressful.

Although this psychological upset was not unexpected, the intensity of the feelings expressed—in comparison to previous research efforts—was surprising to the authors of this paper—so much so that this topic was carefully reviewed with the community organizations that facilitated recruitment of subjects and provided transcription/translation services for the study. These organizations reported that during provision of transcription/translation for the focus groups, they too had noticed and remarked upon the surprising intensity of the feelings expressed by the participants, especially at their willingness to share it with someone from outside the community.

Somewhat of a paradox also exists in the findings of this study. On the one hand, the participants loudly articulated the indignity they suffer over their working conditions. On the other hand, they describe the many ways in which they cope with injury by working through it or rationalizing it away through normalization of injury or logically inconsistent self-appraisal of their own health. Some of the participants view work-related injuries and illnesses as just a part of life, not necessarily a condition that can be improved. However, it is important to recognize that the codification of work-related injuries and illnesses into something that is fixed or must be accepted is not a failure of the individuals' ability to grasp this condition. Rather, it arises as a coping mechanism with which they attempt to reconcile

economic vulnerability and social disenfranchisement with the need to provide for their family.

Some authors^{38,39} have identified a number of Latino “cultural traits” that have been used to explain health disparities experienced by Latino immigrants. Among these traits are *machismo* (an exaggerated masculinity), *fatalismo* (the sense that one’s fate is beyond one’s control), and *respeto* (a pronounced deference to authority). The authors of this study believe that other constructs may provide a more meaningful understanding of the work behaviors of these immigrants. Although working through injury and minimizing safety concerns would be consistent with *machismo*, in this study the male participants were outnumbered 3:1 by female participants. In addition, the female participants were as likely to report such behaviors as the males. In a study that applied the Theory of Work Adjustment to Latino immigrants, Flynn et al.¹³ reported that the immigrants overwhelmingly relied upon *reactive* coping mechanisms—by which they attempted to adapt themselves to the work environment—and seldom used *active* coping mechanisms—by which they attempted to get the work environment to change. The *normalization of injury* and *inconsistent self-appraisal of health* can be interpreted as reactive coping mechanisms. The concept of *cognitive dissonance*⁴⁰ refers to the psychological discomfort experienced by individuals when some of their thoughts or actions are inconsistent with their other thoughts or actions. Individuals may attempt to reduce this dissonance by changing either their behaviors or their thoughts to be more internally consistent. It is difficult to believe that all of the participants have an innate predisposition to accept unsafe working conditions and to minimize the health-related consequence of work. The *normalization of injury* and *inconsistent self-appraisal of health* may represent the dissonance reduction efforts of these socially disenfranchised workers. As a coping mechanism, these rationalizations do not make the workers any safer, but they do make it easier to face unsafe working conditions.

A positive finding from this study is the importance of peer-group networks in providing both emotional support and information about less hazardous ways of doing one’s work. This finding suggests that a “grassroots” peer-based approach should be explored as a route for interventions among building cleaners; particularly those used in private residences. This peer-based approach is similar to the *promotoras de salud* model that is widely used in public health. In this model, *promotoras*, or lay health workers, are members of the Latino community who provide health education to their peers. Widely used for the prevention of chronic diseases, *promotoras* have been successful due to their ability to understand and advocate for their community while bridging cultural barriers.⁴¹ While *promotoras* have been less frequently used in occupational health than in other avenues of public health, they have been effectively utilized in industries that are both dangerous and have a largely immigrant workforce. In one intervention, *promotoras* presented an educational story about a specific health risk to Latino poultry-processing workers. Even though the follow-up was a year later, the majority of workers remembered key details of the story and almost half reported adopting safer behaviors.⁴² *Promotoras* have also been

successfully used among agricultural workers, for example, in increasing knowledge of how to protect oneself and one’s children from pesticide exposure and improving behaviors that minimize pesticide exposure.⁴³ The *promotoras de salud* model could be ideal for building cleaners, as members of the community are trusted sources of information and have access to often hard to reach immigrant populations.

4.1 | Study limitations

As applies in nearly all qualitative studies, one may only diligently attempt to reach *saturation*—the point at which no new themes emerge. The themes that do emerge are influenced by how representative the study group is of the target population and by the orientations and biases of the coders. Qualitative analysis typically does a good job of describing the range of responses to any given topic, but due to sample size and methodological shortcomings, it cannot speak directly to distribution of these responses. Although snowball sampling can be successful in recruiting otherwise hard to reach participants, there is a possibility that those recruited might not be fully representative of the target population. Immigrants affiliated with community advocacy groups may be more sensitive to any political and social injustice that may be associated with their documentation status and be more willing to discuss these concerns with an interviewer from outside their community.

This study may also be limited due to recruitment difficulties. The focus groups averaged three to four participants as opposed to the targeted six to nine participants. The project recruiters attributed this shortfall to the many different shifts worked and the multiple jobs held by building cleaners. The authors agree with this conclusion. Although smaller focus groups limit the amount of interaction between participants, they also allow for more in-depth discussions of a topic. Comparison across all the focus groups found no differences in the range of topics raised that could be attributable to focus group size. Finally, as was previously discussed, the recruitment of participants affiliated with community advocacy groups might have also influenced the topics discussed.

5 | CONCLUSION

The findings from this study suggest that interventions for building cleaners should not only address occupational hazards such as repetitive motion and exposure to harmful chemicals but should also address organizational and psychosocial factors by teaching coping strategies for dealing with stress and negotiation skills to use if being exploited due to factors such as documentation status. Occupational safety and health professionals should be aware of and account for these factors when designing, implementing, and evaluating safety initiatives. The complex situation of Latino building cleaners suggests that a holistic approach is required when it comes to designing and implementing preventive measures. It will be difficult to include

employers in this outreach effort. Many of the homeowners and small businesses that use the services of building cleaners do not think of themselves as employers, but as customers of a service. Many of the immigrants who clean private homes or small businesses are for all practical purposes self-used. Those who do work under the “umbrella” of another business are often considered subcontractors—not employees—and are therefore responsible for themselves. Future activities in this area should continue to explore the level of indignation and demoralization experienced by these workers as well as identifying social, organizational, and environmental supports to facilitate more helpful coping strategies over the long term.

ACKNOWLEDGMENT

The authors would like to acknowledge Sheli DeLaney for her contribution to conceptualization and study design in the formative stages of this study. This work was performed at National Institute for Occupational Safety and Health, and was supported entirely from internal CDC/NIOSH funding.

CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

DISCLOSURE BY AJIM EDITOR OF RECORD

Paul Landsbergis declares that he has no conflict of interest in the review and publication decision regarding this article.

AUTHOR CONTRIBUTIONS

DEE was involved in the conceptualization of this study, analyzed, and interpreted the focus group data, and participated in drafting the manuscript. BO translated the focus groups, analyzed the focus group data, and participated in drafting the manuscript. BMK consulted on the project, participated in drafting the manuscript, and edited the manuscript. MAF consulted on the project and participated in drafting the manuscript.

ETHICS APPROVAL AND INFORMED CONSENT

This study was performed at CDC/NIOSH in Cincinnati, OH. The work was reviewed and approved by the CDC/NIOSH Institutional Review Board. Participants provided verbal informed consent.

DISCLAIMER

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention.

ORCID

Brenna M. Keller  <http://orcid.org/0000-0003-2675-8314>

REFERENCES

1. BLS. U.S. Department of Labor, Occupational Outlook Handbook, Janitors and Building Cleaners (Work environment); 2016. <https://www.bls.gov/ooh/building-and-grounds-cleaning/janitors-and-building-cleaners.htm>. Accessed July, 2018.
2. BLS. U.S. Department of Labor, Occupational Outlook Handbook, Data for Occupations Not Covered in Detail (Maids and house-keeping cleaners); 2016. <https://www.bls.gov/ooh/about/data-for-occupations-not-covered-in-detail.htm>. Accessed July, 2018.
3. Alamgir H, Yu S. Epidemiology of occupational injury among cleaners in the healthcare sector. *Occup Med*. 2008;58(6):393-399. <https://doi.org/10.1093/occmed/kqn028>
4. Charles LE, Loomis D, Demissie Z. Occupational hazards experienced by cleaning workers and janitors: a review of the epidemiologic literature. *Work*. 2009;34(1):105-116.
5. Zock JP. World at work: cleaners. *Occup Environ Med*. 2005; 62(8):581-584. <https://doi.org/10.1136/oem.2004.015032>
6. EU-OSHA. The occupational safety and health of cleaning workers; 2009 https://osha.europa.eu/en/publications/literature_reviews/cleaning_workers_and_OSH/view. Accessed May, 2018.
7. Kumar R, Kumar S. Musculoskeletal risk factors in cleaning occupation—a literature review. *Int J Ind Ergonom*. 2008;38(2):158-170.
8. Flores LY, Deal JZ. Work-related pain in Mexican American custodial workers. *Hispanic J Behav Sci*. 2003;25(2):254-270. <https://doi.org/10.1177/0739986303025002007>
9. Medina-Ramon M, Zock JP, Kogevinas M, Sunyer J, Anto JM. Asthma symptoms in women employed in domestic cleaning: a community based study. *Thorax*. 2003;58(11):950-954.
10. Boden LI, Spieler EA, Wagner GR. The changing structure of work: Implications for workplace health and safety in the US. *Future of Work Symposium. U.S. Department of Labor*. 2016.
11. Porthé V, Ahonen E, Vazquez L, et al. Extending a model of precarious employment: a qualitative study of immigrant workers in Spain. *Am J Ind Med*. 2010;53(4):417-424.
12. Eggerth DE, DeLaney SC, Flynn MA, Jacobson CJ. Work experiences of Latina immigrants: a qualitative study. *J Career Dev*. 2012;39(1): 13-30.
13. Flynn MA, Eggerth DE, Jacobson CJ, Jr. Undocumented status as a social determinant of occupational safety and health: the workers' perspective. *Am J Ind Med*. 2015;58(11):1127-1137. <https://doi.org/10.1002/ajim.22531>
14. Jørgensen MB, Rasmussen C, Carneiro IG, et al. Health disparities between immigrant and Danish cleaners. *Int Arch Occup Environ Health*. 2011;84(6):665-674.
15. Panikkar B, Brugge D, Gute DM, Hyatt RR. “They see us as machines”: The experience of recent immigrant women in the low wage informal labor sector. *PLOS One*. 2015;10(11):e0142686. <https://doi.org/10.1371/journal.pone.0142686>
16. Panikkar B, Woodin MA, Brugge D, Hyatt R, Gute DM. Characterizing the low wage immigrant workforce: A comparative analysis of the health disparities among selected occupations in Somerville, Massachusetts. *Am J Ind Med*. 2014;57(5):516-526. <https://doi.org/10.1002/ajim.22181>
17. NIOSH. Safety and health among hotel cleaners. Cincinnati, OH: US Dept. of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health; 2012.
18. National Council of La Raza. The price of luxury: Latinos in the hotel and accommodation sector. Building a New Economy Monthly Latino Employment Report; 2011.

19. BLS. Labor force characteristics by race and ethnicity, 2016; 2017. <https://www.bls.gov/opub/reports/race-and-ethnicity/2016/home.htm>. Accessed May, 2018.
20. BLS. Employed persons by detailed occupation, sex, race, and Hispanic or Latino ethnicity. Labor Force Statistics from the Current Population Survey; 2018. <https://www.bls.gov/cps/cpsaat11.htm>. Accessed May, 2018.
21. CDC. Work-related injury deaths among Hispanics—United States, 1992–2006. *MMWR Morb Mortal Wkly Rep.* 2008;57(22):597–600.
22. NIOSH, ASSE. Overlapping vulnerabilities: the occupational safety and health of young workers in small construction firms. In Flynn, MA, Cunningham, TR, Guerin, RJ, et al. Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 2015-178; 2015.
23. BLS. Fatal occupational injuries incurred by Hispanic or Latino Workers in 2015; 2015. <https://www.bls.gov/iif/oshwc/cfoi/hispanic-or-latino-fatal-injuries.htm>. Accessed May, 2018.
24. BLS. Foreign-born workers: Labor force characteristics 2017. Washington, DC: News Release Bureau of Labor Statistics US Department of Labor; 2018.
25. Passel J, Cohn DV. Size of U.S. unauthorized immigrant workforce stable after the great recession. Washington, DC: Pew Research Center; 2016.
26. Buchanan S, Vossen P, Krause N, et al. Occupational injury disparities in the US hotel industry. *Am J Ind Med.* 2010;53(2):116–125. DOI: doi. <https://doi.org/10.1002/ajim.20724>
27. Premji S, Krause N. Disparities by ethnicity, language, and immigrant status in occupational health experiences among Las Vegas hotel room cleaners. *Am J Ind Med.* 2010;53(10):960–975. <https://doi.org/10.1002/ajim.20860>
28. Garza JL, Cavallari JM, Wakai S, et al. Traditional and environmentally preferable cleaning product exposure and health symptoms in custodians. *Am J Ind Med.* 2015;58(9):988–995. DOI: doi. <https://doi.org/10.1002/ajim.22484>
29. Hsieh YC, Apostolopoulos Y, Hatzudis K, Sonmez S. Occupational exposures and health outcomes among Latina hotel cleaners. *Hisp Health Care Int.* 2014;12(1):6–15. <https://doi.org/10.1891/1540-4153.12.1.6>
30. Svanes O, Bertelsen RJ, Lygre SHL, et al. Cleaning at home and at work in relation to lung function decline and airway obstruction. *Am J Respir Crit Care Med.* 2018;197(9):1157–1163. <https://doi.org/10.1164/rccm.201706-1311OC>
31. Vizcaya D, Mirabelli MC, Anto JM, et al. A workforce-based study of occupational exposures and asthma symptoms in cleaning workers. *Occup Environ Med.* 2011;68(12):914–919. <https://doi.org/10.1136/oem.2010.063271>
32. Hsieh YC, Apostolopoulos Y, Sonmez S. Work conditions and health and well-being of Latina hotel housekeepers. *J Immigr Minor Health.* 2016;18(3):568–581. <https://doi.org/10.1007/s10903-015-0224-y>
33. Lundberg H, Karlsson JC. Under the clean surface: working as a hotel attendant. *Work Employ Soc.* 2011;25(1):141–148. <https://doi.org/10.1177/0950017010389246>
34. Simcox N, Wakai S, Welsh L, Westinghouse C, Morse T. Transitioning from traditional to green cleaners: an analysis of custodian and manager focus groups. *New Solut.* 2012;22(4):449–471. <https://doi.org/10.2190/NS.22.4.e>
35. Strauss AL, Corbin JM. Basics of qualitative research: grounded theory procedures and techniques. Thousand Oaks, CA: Sage Publications; 1990.
36. Flynn MA, Carreón T, Eggerth DE, Johnson AI. Immigration, work and health: a literature review of migration between Mexico and the United States. *Revista Trab Soc.* 2014;6:129–149.
37. Eggerth DE, Flynn MA. Immigration and stress. In: Genkova P, Ringeisen T, Leong FT, eds. *Handbuch Stress und Kultur: interkulturelle und kulturvergleichende Perspektiven (Handbook of Stress and Culture: Intercultural and Cross-cultural Perspectives)*. Wiesbaden, Germany: Springer VS; 2013:pp. 343–359.
38. Cuellar I, Arnold B, Gonzalez G. Cognitive referents of acculturation: assessment of cultural constructs in Mexican Americans. *J Community Psychol.* 1995;23:339–356.
39. Antshel KM. Integrating culture as a means of improving treatment adherence in the Latino population. *Psychol Health Med.* 2002; 4(4):435–449.
40. Aronson E. *The social animal*. fourth ed. New York, NY: W.H. Freeman and Company; 1984.
41. Ingram M, Reinschmidt KM, Schachter KA, et al. Establishing a professional profile of community health workers: results from a national study of roles, activities and training. *J Community Health.* 2012;37:529–537.
42. Grzywacz JG, Arvury TA, Marin A, Carrillo L, Coates ML, Quandt SA. Using lay health promoters in occupational health: outcome evaluation in a sample of Latino poultry-processing workers. *New Solutions.* 2009;19(4):449–466.
43. Liebman AK, Juarez PM, Leyva C, Corona A. A pilot program using promotoras de salud to educate farmworker families about the risks from pesticide exposure. *J Agromedicine.* 2007;12(2):33–43.

How to cite this article: Eggerth DE, Ortiz B, Keller BM, Flynn MA. Work experiences of Latino building cleaners: An exploratory study. *Am J Ind Med.* 2019;62:600–608. <https://doi.org/10.1002/ajim.22986>