

Work Conditions and Health and Well-Being of Latina Hotel Housekeepers

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Abstract Hotel housekeepers are exposed to a plethora of disproportionately high work-induced hazards that can lead to adverse health consequences. Latina hotel housekeepers are rendered particularly vulnerable to elevated occupational hazards and resultant health strains due to their socioeconomic status, immigration status, language barriers, and lack of access to healthcare services. The findings from the 27 interviews with Latina hotel housekeepers indicated that the interviewees were exposed to physical, chemical, and social hazards in the workplace and suffered musculoskeletal injuries. In terms of psychological wellness, the time pressure of cleaning rooms quickly and work-related stress stemming from workplace mistreatment emerged as major work-related stressors. Recommendations are made for the introduction of multilevel interventions designed to prevent work-related injuries and illnesses and to promote healthier workplaces.

Keywords Cleaners · Hotel employees · Immigrant workers · Work environment · Occupational health

Background

United States workers of Hispanic origin face a number of occupational hazards and challenges in the workplace, particularly in the hotel and hospitality sector. The U.S. hospitality and tourism industry accounts for 14.3 million jobs [1, 2]; the hospitality industry employs 561,000 Latinos, of whom 50 % are female (Latinas) [2]. Of these Latina accommodation sector employees, 41 % take on cleaning tasks in the housekeeping department of hotel properties, which are often considered “dirty” jobs [2]. In the accommodation industry, Latino workers represent over 22 % of the workforce, as compared to 14.6 % of the general workforce [3]. Compared with other ethnic groups, Latinas are overrepresented in the occupation of housekeeper/room cleaner [1]. Empirical evidence indicates that Latina hotel housekeepers have an injury rate of 10.6 %, which is nearly twice the rate of their non-Latina counterparts [4]. More often than not, Latina housekeepers’ socioeconomic backgrounds, immigration status, lack of English proficiency, and limited or total lack of access to healthcare services exacerbate their occupational stress and place them at increased risk for a number of psychological and physical health problems [5].

While the occupation of hotel room cleaning is physically demanding [6], wages are low at an average annual income of \$19,570 [7]. In addition, the work environment exposes employees to various physical risks and psychosocial stressors, as well as chemical, biological, and toxic substances that can potentially lead to respiratory, dermatological, or infectious diseases [4, 8–12]. Nevertheless, while Latina

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hotel housekeepers have been identified as an under-researched and underserved occupational group facing unequal distribution of health outcomes compared to other blue-collar occupations, they have received little research attention to date [4, 13, 14].

Since studies on Latina hotel housekeepers are scant, we intended to use this exploratory study to advance our understanding of their current work and health conditions and to identify possible problems, with the goal of encouraging more research on this underserved group. Specifically, this paper: (1) examines the physical and psychosocial work conditions of Latina housekeepers as well as the state of their health and wellbeing; (2) discusses work safety and health practices in their hotel work environment; (3) explains coping skills and mechanisms employees and employers use to alleviate work-related injuries and illnesses; and (4) offers recommendations for future research to improve Latina hotel workers' occupational health, safety, and overall quality-of-life.

Work Exposures and the Health of Latina Hotel Housekeepers

The effects of work conditions on health have been well documented [15–17]. The three most commonly studied aspects of work conditions in relation to health are job demand, job control, and social support at work. Job demand has been defined [17] as the volume of work to be accomplished, as well as the requirements and time constraints related to the work. They found highly demanding jobs to be associated with the development of carpal tunnel syndrome, resulting in a greater rate of disengagement from employment. Job control is defined as the autonomy a worker has in making decisions about the order and manner in which one's work is done [18]. Karasek studied the relationship between job control and employees' psychological well-being and proposed that prolonged low levels of job control increase employees' mental stress and health problems [19]. According to the "job strain" model, the interaction of two factors—high job demand and low job control—can predict adverse health effects on workers such as fatigue, anxiety, depression, exhaustion, sleep disruption, and physical illness [18, 20]. Studies have found that job strain is a good predictor of musculoskeletal disorders such as low back or neck pain, shoulder pain [21–23], and cardiovascular disorders such as hypertension or myocardial infarction [24–27].

Social support refers to the concern and assistance supervisors and peers provide [18]. Social support has been associated with improvements in health, temperament, psychological symptoms, depression incidence, safety, job turnover, and occupational stress [28, 29]. Extending the

job strain model, the social isolation strain model proposes that the most hazardous jobs are those in which high job strain is combined with low levels of social support at work [30].

To summarize, cleaning hotel rooms involves adverse work conditions including heavy and repetitive physical strains (e.g., high aerobic strain, repetitive movements, high static muscular loads), chemical and biological hazards (e.g., toxic substances used for cleaning), and poor psychosocial conditions (e.g., time pressure, low job control and job security, low wages, limited opportunities for career development). The sections below further describe these work conditions, exposures, and consequences on health.

Physical Strains and Hazards

A hotel housekeeper typically changes body position every 3 s in the process of cleaning one room, yielding 8000 different body postures during each 8-h shift [8]. Simultaneously, time pressures associated with the fast-paced work cause housekeepers to endure high aerobic strains, heavy static muscular loads, various awkward postures, and overexertion. Housekeepers are also more likely than other types of workers to suffer from repetitive motion injuries (RMIs) [8]. Not surprisingly, housekeepers have the highest rate of musculoskeletal disorders among all hotel employees, with 3.2 cases per 100 workers [4]. In addition, studies [31, 32] have also demonstrated that cleaning floors can increase cardiovascular loads to a level (53 % of maximal oxygen uptake [VO_2 max]) that exceeds the guidelines (33 % of VO_2 max) established by the International Labor Organization [33] and the U.S. National Institute for Occupational Safety and Health [34], which elevates cardiovascular risks for housekeepers. These physical hazards are intensified by the poor ergonomic design of cleaning equipment such as heavy trolleys filled with supplies and industrial-strength vacuum cleaners. Furthermore, the introduction of luxury rooms that feature oversized mattresses; opulent, heavy linens; heavier-weight solid wood furniture; and various upgraded amenities makes the work even more strenuous [10, 35].

In one study of San Francisco hotel housekeepers, over 75 % of the 258 participants indicated experiencing work-related pain [36]. Of these, 73 % had to visit a physician due to severe pain, and 53 % had to take time off from work in order to recover; participants reported a median 14-day absence caused by their injuries. Similar results were found in a larger-scale study of over 900 hotel room cleaners in Las Vegas, which revealed that 95 % of the workers surveyed experienced work-related physical pain, and 83 % reported feeling constant time pressures [37].

The Las Vegas study also reported work-related pain across all age groups of housekeepers. In a Lumbar Motion Monitor study, housekeeping jobs were found to have a 76 % probability of causing lower-back injuries, greater than any of the other 20 manufacturing jobs examined [38]. Studies of hotel cleaners have consistently found that workers are more likely to report pain in their shoulders, hands, neck, and upper and lower back [37, 39]. This physical pain is believed to interfere with routine activities as well, forcing the workers to take pain medication on a regular basis, even when not working [40].

Chemical and Biological Hazards

Hotel housekeepers are regularly exposed to hazardous chemicals found in the cleaning products they use, including ammonia and harsh solvents that irritate the skin, eyes, nose, and throat. Prolonged exposure to these volatile organic compounds can cause problems ranging from dermatitis and respiratory diseases, to heart and kidney failure, and even cancer [41]. Hotel housekeepers frequently report allergic reactions from exposure to latex gloves used during cleaning and rashes resulting from harsh chemicals used to clean linens [9, 40].

Biological hazards are infectious agents that may be transmitted via contact with infected people or contaminated objects, human tissue, or body secretions, presenting an increased risk of illness, injury, and even death to employees [42]. While cleaning guest rooms, hotel housekeepers can potentially come into contact with broken glassware, used hypodermic needles and other medical waste, as well as contaminated waste, human excreta, mold and microbial contaminants. Contact with such biological hazards can put hotel cleaners at risk of contracting blood-borne infections such as HIV/AIDS or Hepatitis B [9].

Psychosocial Hazards

In addition to chemical and biological hazards, chronic stress, the risk of violence, and bullying by co-workers can adversely affect hotel housekeepers' mental and physical health [43]. Of the 10 key workplace psychosocial risk factors identified by the World Health Organization [44], nine correspond with hotel housekeepers' job characteristics: (1) *job content*: lack of variety, high uncertainty; (2) *work load and pace*: work overload, high levels of time pressure; (3) *work schedule*: inflexible schedules, long hours; (4) *work control*: low participation in decision making, minimal-to-no control over workload; (5) *environment and equipment*: inadequate availability of necessary equipment; (6) *organizational culture and function*:

poor communication, low levels of support for problem solving and personal development [37, 45]; (7) *interpersonal relationships at work*: social or physical isolation, poor relationship with superiors, lack of social support, discrimination, bullying, and harassment [37, 46]; (8) *career development*: poor pay, job insecurity, low social value of work, lack of advancement opportunities [47] and (9) *home-work interface*: conflicting demands between work and home as high work-induced physical demands exhaust hotel cleaners and adversely affect their family lives [10, 48]. Prolonged exposure to adverse psychosocial work conditions can trigger physiological, behavioral, emotional, or cognitive reactions, leading to psychological disorders such as anxiety, depression, or other mental health problems, as well as burnout and substance misuse as coping mechanisms [9, 42, 49].

While all hotel housekeepers may experience some of the hazards listed above, Latina hotel housekeepers are particularly vulnerable due to their immigration status, lack of English proficiency, and difficulty navigating a foreign culture. In the Las Vegas study referenced earlier, elevated physical workload, high pressure, low job control, high psychological demands, and high job stress all increased the risk of ill health or severe pain among Latina hotel cleaners [37]. Interestingly, housekeepers who experienced shoulder pain reported both lower supervisor support and lower social support overall [47] while significant associations were recorded between effort-reward imbalance and shoulder pain [10]. Moreover, the majority of hotel cleaners experienced an imbalance between their efforts and rewards at work, which were significantly associated with poor general health, low physical functioning, high levels of fatigue, chronic bodily pain, interference with work, and role limitations [5].

Study Methods

This study initiates a stream of research on the occupational health of hotel housekeepers. Latina hotel housekeepers were designated as the target population, due to their predominance in hotel housekeeping work [2] and because their gender role leaves them more susceptible than their male counterparts to psychosocial health issues [50, 51]. The main objectives of the study were balanced against the anticipated challenges of conducting research with an immigrant population with questionable documentation. Initially, the study was designed as an interviewer-administered survey with a convenience sample of Latina hotel housekeepers. A convenience sample design was planned due to the limited size of the Latina hotel housekeeper population in the southeastern city where the study was conducted—with a population of 277,000 of

which only 7.9 % are Hispanic and only 8 % work in the accommodation and food services sector [52]. Following the design, development, English–Spanish–English translation, and validation of the survey instrument; hiring and training of a bilingual field research team; and the initiation of participant recruitment efforts at local hotels, the research team realized that recruiting a sufficient-sized sample ($N = 100$) necessary for statistical analysis of data would be extremely difficult. Potential study subjects were either unwilling to participate in a study regarding issues related to their employment thinking it would get them into trouble or they feared that researchers would reveal their identities to U.S. Citizenship and Immigrant Services; housekeepers the field researchers approached openly stated these sentiments.

The study was thus redesigned, as a small-scale ethnography. Semi-structured in-depth interview guides were developed and a new series of subject recruitment efforts were launched, including higher cash incentives of \$40 for study participants. Following necessary amendments to Institutional Review Board approvals originally obtained for the survey design, data collection commenced. Although changes to the research strategy resulted in delays, the process was extremely informative and will determine how future studies with this population will be managed. Two bilingual hospitality management students (one Latina, one Latino) were hired and extensively trained in participant recruitment, obtaining informed consent, explaining study objectives, confidentiality, process of recording and transcribing interviews, conducting in-depth interviews, and probing. Their cultural sensitivity created a highly desirable level of comfort and greater trust among study participants, and increased the success of interviews.

In-depth Interview Guides

The interview questions focused on eight primary themes: (1) *personal background*; (2) *overall work experience*; (3) *physical work conditions*; (4) *work equipment and supplies*; (5) *job satisfaction, job security, support, work stress*; (6) *health and safety at work*; (7) *physical and mental health*; and (8) *methods of dealing with workplace injuries/illnesses and stress*. A series of probes were included for each set of questions to tease out short responses and obtain rich and detailed information.

Sampling and Recruitment

The sampling frame was comprised of 75 local hotels that included 4-star, 3-star, 2-star, and 1-star properties (based on the AAA Hotel Ranking System) as described in

Table 1 below. Other than three individual hotels, the rest were franchises (i.e., Holiday Inn Express, Best-Western, Drury Inn, Embassy Suites, Marriott, Fairfield, Hyatt, La Quinta, Quality Inn, Ramada Inn, Red Roof Inn, and Days Inn). The research team was well aware of the risk of overrepresentation of hotels from the portfolio of a few ownership groups, which would introduce bias due to the replication of corporate policies affecting human resource management and work conditions. Geographic limitations along with overlaps in the publicly available portfolios of ownership groups made it difficult to discern which group owned which property. To minimize this bias, a random selection of hotels was made resulting in 40 properties representing all four star levels. Of these 40 hotels, twelve were individual and 28 were franchised companies.

General Managers' offices of all 40 hotels were contacted to explain study objectives and solicit permission to communicate directly with executive housekeepers to reach housekeeping staff. Of those contacted, 16 properties agreed to let the study team meet with their housekeepers. The principal investigator, who had cultivated strong relationships with local hotels over the previous 10 years, then worked with her contacts at the selected hotels to initiate the recruitment process for study participants.

Following the granting of the requisite permissions, bilingual (English–Spanish) flyers explaining study objectives, confidentiality issues, and cash incentives were delivered to the participating hotels, for distribution to Latina hotel housekeepers. With the approval of executive housekeepers, a total of 16 information sessions were organized at hotel sites, during which light refreshments were provided and researchers and field workers introduced themselves and explained study objectives, informed consent process, confidential nature of participant involvement, and incentives and responded to any questions or concerns expressed by potential participants. While most of the housekeepers readily agreed to participate, several expressed uncertainty and concern. This was partially attributed to being at their job location and feeling nervous about possible backlash from their supervisors for their involvement.

Additional recruitment efforts were broadened to the local Hispanic community. Flyers regarding the study and researchers' contact information were posted at various locations around town, including Mexican restaurants, international grocery stores, Hispanic Catholic churches, and nonprofit organizations with immigrant-focused assistance programs. Small stands were erected at the entrance of some of these locales, frequented by the local Hispanic community, with flyers and small treats for their children. These offered opportunities to provide information about the study and address any questions or concerns individuals expressed. Women who expressed interest were screened

Table 1 Sample of hotels and housekeepers

AAA ranking	# of hotels	% of hotels	Random sample of hotels	Information sessions hosted	Recruitment from hotels	Recruitment from community	Total study participants
4-Star	3	.04	2	2	6	2	8
3-Star	35	.47	19	9	9	3	12
2-Star	24	.32	13	5	5	2	7
1-Star	13	.17	7	0	0	0	0
Total	75	100	40	16	20	7	27

to assure they were Latina and worked at a local hotel. Additional screening questions were asked about the hotel they were employed at (name, star-level). Community recruitment efforts yielded another set of study participants. Table 1 illustrates total recruitment and sample.

Although interviews are one of the most frequently used methods to collect data, there is no consistent agreement regarding the appropriate sample size [53]. For example, some suggest using the concept of saturation as a guiding principle [54]. Based on Esterberg and McCracken, a sample size of 12 is considered adequate for generating themes in exploratory analysis [55, 56]. Guided by this rule, our target sample size was set at a higher 30. Initially only 13 interviews were completed. Expanded recruitment efforts yielded another 14 participants, bringing our total sample to 27. At the completion of all 27 interviews, both interviewers reported that they received the same or similar responses from their interviewees, implying answer and theme saturation [54]. Due to time and budget constraints—but primarily due to the difficulty of recruiting immigrant workers with uncertain documentation status—after finishing the 27th interview, the researchers decided to close the study, but felt confident with the information collected.

Data Collection and Analysis

At the request of enrolled participants, actual interviews were arranged at a later time to take place at either the participant's home or at a public meeting place (e.g. fast food restaurant, coffee shop) where they felt more at ease due to greater privacy as well as convenience. Following signed informed consent procedures, permission was requested to tape-record the interviews for subsequent translation into English—interviews were conducted in Spanish to assure participants greater self-expression—and verbatim transcription. Interviews lasted between 30 and 45 min and utilized all questions and probes to maximize responses. Each of the 27 interviews was concluded when the collected data reached saturation and

no new information was gained from probes. Researchers adopted a back translation technique to assure the absence of translation errors and two researchers independently reviewed each transcription. The data were coded to explore themes and relationships for the work environment; thick descriptions of the work environment were developed as well as of the interactions of hotel housekeepers with co-workers, leading to explanations of how the work environment influence physical and mental health of hotel housekeepers; and conceptual mapping was conducted to explore relationships among the foregoing themes. Raw responses pertaining to variables of interest were coded into categories by each field researcher, which were then compared for internal homogeneity and external heterogeneity. Following established standards [57], researchers assured that the reliability of coding equalled the number of agreements between coders divided by the total number of agreements and disagreements. Group consensus-building techniques were used to resolve any inconsistencies and a 96 % reliability of coding was achieved.

Study Findings

Theme 1: Personal Background

Interviewees included 21 women from Mexico, three from El Salvador, two from Honduras, and one from Guatemala, ranging in age from 22 to 52 years old. The majority were married (70 %) or single (30 %), but all had children in ages ranging from one to 15. Over half (52 %) of the women had some primary education ranging from 5 to 9 years of schooling, over a third (37 %) had finished high school, and the remaining (11 %) had no formal education at all. All the women had lived in the United States between 6 and 20 years. Except for three women whose husbands had full-time jobs, all had an annual household income ranging between \$8400 and \$19,200, far below the federal poverty line of \$23,550 [58]. Finally, the majority (67 %) reported that they spoke either poor or barely any

English at all with the rest (33 %) indicating their ability to communicate at an intermediate level.

Theme 2: Overall Work Experiences

Recruited housekeepers worked at 2-, 3-, and 4-star hotels, including one airport hotel, one city business hotel, and three highway hotels. The number of rooms in these properties ranged from 114 to 147 rooms. The extent of study participants' work experience with their current hotels ranged from one to 15 years. Except for one participant, who served as a full-time floor supervisor, all the interviewed housekeepers worked part-time and were unable to reach 40 h per week. Interviewees indicated that because they worked close to (but just under) 40 h per week, their hours did not qualify them to be full-time employees eligible to receive benefits, such as health care, paid sick days, and paid holidays. Participants described their work on a typical day, during which they cleaned between 10 and 20 rooms (with an average of about 15 rooms per housekeeper), depending on hotel occupancy rates and were paid between \$7.25 (minimum wage by state law) and \$8 per hour. When asked if they needed or had a second job, they responded affirmatively and several reported having a second part-time job (e.g., babysitting, house cleaning). One housekeeper reported:

“We were required to clock out by 4 p.m. but still stayed until we finished the remaining rooms...if we had two rooms that did not require cleaning, we had to punch out by 3:20 p.m....”

“The minimum wage we receive is \$7.25, and we cannot expect to get a raise after a year or two, because it is not going to happen. Something that is very ridiculous is when they [employer] say ‘you got a raise’, and you look at your paycheck and it is only 10 cents more...”

The benefits that these workers received were limited to two or three paid holidays per year or a few days of paid vacation, based on work hours and seniority. None of the interviewees received sick pay, and all were required to present a physician's note in order to request a sick day, without which they would be terminated or punished with inconvenient scheduling or more difficult work assignments. Because they lacked health insurance, the women usually chose not to see a physician and went to work even when seriously ill. One housekeeper remarked:

“One time, I was hurt with a twisted ankle at work. My manager told me to stay at home but never offered to pay for me while I was off work. Since I need the money, I would go to work with an injured ankle...”

When asked about the positive aspects of the job, most indicated that they were happy that they at least had a job and were earning some type of income. One participant indicated that she considered cleaning rooms to be good physical exercise for her and another expressed enjoying good relationships with her co-workers. Some liked the fact that they were able to get out of work at 2 p.m. and were able to pick up their children from school. Two respondents expressed their appreciation for their managers' flexibility in scheduling work in order to accommodate their personal needs. As for the negative aspects of the job, the housekeepers noted low pay, working overtime on weekends without overtime pay, unfair job assignments or punishments resulting from supervisor favoritism, a sense of discrimination by co-workers, and the slowing-down or inconvenience of work caused by inadequate cleaning equipment and supplies.

“The good things are that I'm learning, I work with people, we have a good relationship with my co-workers and the manager is a great person, the supervisor and everyone. The only bad thing that we don't like is that we are not well paid; it's the only thing. Because we know the cleaning is hard work, the guest sometimes leaves the rooms very dirty especially in the weekends, but really that's the one thing we all complain about, it is not well paid and the raise is not much either like it should be.”

Theme 3: Physical Work Conditions

Housekeepers reported cleaning 10–20 rooms per 8-h shift, depending on the occupancy rate of the previous day. It was common for the women to be assigned rooms on different floors. In general, they were allotted 30 min to clean a check-out room and 20 min for a stay-over room. Many interviewees complained that they needed more time to finish their work, because a stay-over room often took longer to clean, for example when the rooms were occupied by athletes or guests with pets. The majority of participants either skipped their lunch break or rushed through it in order to avoid falling behind in their work and showed great concern about wasting time on trips to the laundry room to restock linens. One interviewee noted:

“People at the laundry do not hurry; they don't care. We work from 8:00 to 3:00, and we don't get out until 6:00 p.m., because they don't hurry to wash them [linens]... Sometimes, we even have to go and fold the linens ourselves so that we can take them upstairs and finish up the rooms...”

“According to them [supervisors], it takes 30 min to clean a check-out [room] but it takes me almost 40 or

45 min. Sometimes the supervisor would tell us to make sure we are not just sleeping in the rooms... it bothers me so much, because it's not easy to clean rooms so fast..."

"We don't take a break even though they [employer] always tell us "you need to take your 30 min break; it is by law"... those North Americans and African-Americans that work here probably would like that [break], but we don't like that, because if they take their breaks, then we [Latinas] have to help them later on. We sometimes feel like we are making their money..."

"I think we shouldn't have a limited amount of time for each room. We should be given a certain amount of hours a day to clean 'X' number of rooms and be able to take our time with the dirtier rooms and go through the cleaner rooms quicker. That would make our job less stressful..."

"If you have fewer rooms, you can take your time and do your job well without all this pressure to finish. The calmer you are, the more careful you will be and less likely to hurt yourself at work ..."

Regarding job assignments, many expressed a feeling of unfairness at being asked to help their American co-workers, who often intentionally worked slowly to clock out at 5:00 pm, just because they (Latina housekeepers) worked faster.

Theme 4: Equipment and Supplies

Three major problems with equipment and supplies were identified, including heavy cleaning equipment, shortage of appropriate cleaning tools/supplies, and toxic cleaning chemicals. All participants reported cleaning carts and vacuum cleaners were heavy and difficult to manoeuvre, and the carts did not have enough space to accommodate soiled linens. Some hotels did not provide cleaning carts; instead, the housekeepers had to physically carry the clean and soiled linens and cleaning equipment up and down the stairs.

Insufficient tools also created barriers and slowed down their cleaning. They battled with each other to wash clothes and get cleaning tools. A few of the study participants indicated that their employers did not provide gloves; instead, they had to purchase gloves using their own money. One participant reported:

"I put my initials on all my stuff, including the cart and my cleaning bottles. All my co-workers say that I am selfish..."

Another interviewee indicated that her manager ordered just enough cleaning chemicals, based on her estimation of

what was required; if the housekeepers used up all of the cleaning chemicals before the next order, they were responsible for purchasing more as a punishment for overusing the cleaning supplies. Interviewees noted:

"There are always missing chemicals or tools. The vacuum cleaners aren't always in good working condition, so I have to use a broom to sweep the rooms ..."

"We don't have mops, so we have to be on our knees cleaning the bathroom floors. I have knee pain because of that. Kneeling on the hard floor isn't fun, and it hurts..."

Many expressed concern that the strong cleaning chemicals dried their skin, cracked their hands, and irritated their eyes. One participant stated:

"Sometimes, some of the bathtubs are really disgusting and using only bleach does not clean them well. So, we use this other pink-colored liquid, which gets the job done, but it has a very strong odor and causes breathing problems while using it... these liquids dry out my skin and cause skin irritation or rashes..."

Theme 5: Job Satisfaction, Job Security, Supervisor/Co-worker Support, and Work Stress

When asked about their level of job satisfaction, 54 % of participants indicated that they were satisfied with their jobs; 23 % expressed mediocre satisfaction, indicating that the job was okay, but they were not satisfied with their pay; and 23 % were not satisfied with their jobs due to reasons such as heavy physical work, low pay, and discrimination by supervisors and co-workers. When asked if they had ever considered quitting their current job, 46 % of interviewed housekeepers said that they had, but would only quit if they could find another, better-paying job. All agreed that cleaning rooms was hard and repetitive work, but it helped pay their bills.

Regarding job security, the answers were mixed. Fifty-four percent of interviewees felt that their jobs were secure and that they could keep their jobs as long as they wanted, while the remaining 46 % felt that their jobs were insecure and they sometimes worried about losing them.

"There is nothing definite about this job. If someone with faster working skills can speak English better, the manager would almost certainly hire them and get rid of us. There is no security at this job..."

"In December and January, work is so slow that we get only two days of work during a week. So, in that case, you never know if you can keep the job..."

In terms of support at work, the majority of participants indicated that they received support from their supervisors when they asked for help. Several participants complained about their Mexican supervisors being unfair to their Mexican peers but nicer to African-American workers, for example, assigning better vacuum cleaners as well as washcloths to African-American housekeepers, which were not offered to Latina housekeepers. One Mexican housekeeper remarked:

“The bad thing is that... umm... I don’t want to call it racism, but I can see a little injustice. There are some African-American housekeepers who are on the phone, and the manager will walk by them and act like nothing; but if it’s one of us it’s different...a lot of the supervisors are Mexican... they will yell at us and embarrass us in front of everyone...”

In terms of support from co-workers, the majority of participants described their coworkers as nice and friendly, with the exception of the three El Salvadorian participants from the same hotel who had problems getting along with their Mexican co-workers. One El Salvadorian housekeeper reflected:

“Some of my co-workers are nice, others try to cause trouble, because I am from El Salvador, and they are from Mexico, and they think they are better than me...”

Another El Salvadorian noted:

“Umm... well I don’t know how I would define what she [a Mexican supervisor] said. For instance, sometimes she criticizes my accent... She says, ‘You have a tone in your voice, like the Indian [natives].’ I know I come from natives and I am not ashamed of it. But I did feel like she said it with the intention of offending me.”

“Every once in a while I am given the dirtier rooms to clean or I am picked on and accused of lying or breaking stuff, and I have to defend myself...”

With regard to work stress, all interviewed housekeepers constantly experienced time pressures at work and rushed to finish their assigned rooms. One participant reflected:

“I am usually stressed because of time constraints and I am usually rushing to finish my work on time. Typically, when the guests aren’t checking out, I stress out more, because I will be on my second room and my co-workers will be on their sixth room. The stress has been giving me bad headaches. So, I went to see a doctor, and he prescribed some medication for me...”

Theme 6: Health and Safety in the Workplace

All housekeepers had observed what appeared to be health and safety posters on bulletin boards, in the dining area, in the break room, or in the laundry room of their hotel workplace; however, all the posters were in English. The majority reported that they had received no safety training in the previous 6 months, although two mentioned receiving fire and earthquake emergency training every 3–4 months.

“When we go into the rooms in which guests have smoked marijuana, it causes a bad headache. We have talked to our manager about the smell, but she doesn’t care. She tells us to let the air out and then go clean... we have stopped telling her, because she doesn’t care...”

“They [supervisors, managers] care for productivity. I once hurt my foot and all they did was to look at my foot and asked me if I could still work. They didn’t care if I was in pain. They still kept me working.”

“They [employer] just expect us to get the job done, and we have to find ways of doing our job without getting into trouble or getting hurt...”

“She [manager] worried more about having her rooms cleaned to rent out than us being healthy.”

When an injury or accident occurred at work, the housekeeping managers asked if the injured party needed to go to a hospital. In some cases, the hotels paid the housekeeper’s medical expenses, but in most cases, the employee paid her own bill. If the housekeeper declined medical attention, she was required to sign a document indicating her refusal to remove hotel liability. Since none of the housekeepers were covered by health insurance, they generally chose not to see a healthcare professional. After being advised to be careful, no further actions were taken to investigate the cause of the injury or accident.

One housekeeper expressed her frustration about being an undocumented worker and the associated insecurity:

“I have to work regardless of my health condition. No matter what day of the year it is, being a holiday, I don’t get it off, and I am not paid extra for holidays. I don’t even get paid leave or an annual bonus, not even a \$20! They [employers] are clearly not grateful for what we do...” She added: “It’s sad how those employees who can legally work are able to collect unemployment when they lose their job, whereas undocumented workers don’t get to see any money unless they are out working. So they usually don’t speak up, or complain, as they really need the job...”

Theme 7: Physical and Mental Health

Without health insurance, housekeepers tended to see health professionals only in emergencies. Most believed that, in general, they were in good physical health, but two housekeepers reported having high blood pressure, one reported being diabetic, and another suffered from varicose veins. None of the housekeepers smoked, and all managed to sleep between 5 and 9 h a night. Respondents reported frequent body pains in their arms, elbows, upper and lower back, knees, legs, neck and shoulders, waist, and ankles. Interviewed housekeepers listed types of physical pain they experienced during the previous 4 weeks (Table 2).

Other respondents offered some of their experiences:

“I experience major pain in my right elbow, arm, and hand, probably because of the cleaning of the bathroom, and it’s the arm I use to vacuum... and my co-workers also complain about pain in their waist and hips... This job does cause a lot of the pains in the body...”

“Well, every day, at the beginning of the day, I am full of energy but at the end of the day, my batteries start to die off.”

“Sometimes I had extreme pain in my fingers (tendons), which made me cry. My doctor told me this was because of the repetitive and hard labor I am doing.”

Eighty-five percent of interviewed housekeepers reported very dry and chapped hands and skin attributed to cleaning chemicals, and 31 % experienced red, irritated, or burning eyes when using these products. Trips and falls were the most common accidents in the workplace during the preceding year. One participant reflected:

Table 2 Physical pain and discomfort experienced by housekeepers

	Number (N = 27)	Frequency (%)
Skin irritations	22	81
Neck/shoulder	13	48
Upper back	13	48
Lower back	13	48
Elbows/upper arms	12	44
Eye irritations	12	44
Knees	11	41
Elbows/lower arms	10	37
Hips	9	33
Ankles/feet	9	33
Hands, wrists, fingers	9	33
Headaches	9	33
Legs	8	30
Chest/abdomen	3	11

“My main health concerns due to work are muscle and back pain from carrying all the heavy stuff up and down the stairs, the rashes and skin irritations due to cleaning products. I have a bladder problem, which is due to the strain of carrying heavy equipment and supplies up and down the stairs. I have cuts on my hands, burning in my eyes and nose because of the strong fumes from the chemicals. I only started getting these problems after working at the hotel...”

All housekeepers believed they were mentally healthy, except 15 % who had high stress levels from work and family that required treatment with prescription medications. The majority of the women indicated feeling stressed out on a regular basis. The sources of their stress were related to work (e.g., rushing to finish work on time) or family finances (e.g., insufficient money to pay bills).

Theme 8: Methods of Dealing with Workplace Injuries/Illnesses and Stress

Interviewees indicated they used protective equipment that included rubber gloves, masks, and back support belts. One participant shared her own remedy to alleviate physical pain from work:

“After work, I feel so tired and I feel pain in my legs and knees... I usually take a shower and do my remedy, which I put alcohol on my legs and knees and that’s it...”

Participants described various other coping strategies to deal with ongoing stress, such as praying, crying, spending time with family and friends, taking walks, reading books, listening to music, eating, making time for themselves, going shopping, calling in sick, cutting or biting nails, self-medicating, and maintaining a sense of humor (Table 3 below).

One interviewee explained her own coping strategy:

“Spending time with my family always helps me to relieve my stress... I talk about my anxiety with my husband, even my co-workers. Sometimes, we share opinions, and it helps you lower the stress, because you realize that it’s not just you who is stressed out...”

Discussion

Summary of Key Findings

Findings from discussions with 27 Latina hotel housekeepers indicate that interviewees felt exposed to physical,

Table 3 Coping mechanisms of Latina hotel housekeepers

	Number (N = 27)	Frequency (%)
Be with friends/family	19	70
Meditate/pray	18	67
Spend time outdoors (e.g., walking, running, playing with kids)	12	44
Listen to music	11	41
Make time for myself	10	37
Get enough sleep	7	26
Use humor	5	19
Exercise regularly	5	19
Eat a lot	4	15
Cry	2	7
Bite nails	1	4
Call in sick	1	4

chemical, and social hazards in the workplace that had adverse effects on their physical and mental health. These participants reported musculoskeletal injuries consistent with repetitive work, possibly exacerbated by their use of heavy cleaning equipment and lack of breaks during work shifts. In addition, injuries from trips and falls, and skin issues caused by toxic cleaning chemicals were also reported. The majority of the hotels where participants worked did not provide regular safety training or hang bilingual (Spanish–English) work safety posters.

In terms of psychological wellness, the time pressure of cleaning rooms quickly was the primary work-related stressor reported by participants. Additional work-related stress stemmed from issues including lack of overtime pay and sick leave, unfair work assignments, and racial/ethnic discrimination. The three El Salvadorian interviewees felt they had been discriminated against by being assigned poor cleaning tools or being judged or punished differently from members of other racial/ethnic groups.

Studies suggest that exposure to social hazards in the workplace (e.g., discrimination, harassment, bullying, mistreatment, retaliation) are associated with multiple adverse outcomes, including psychological distress, anxiety, depression, negative emotions, high blood pressure, bodily pain, and sleep disorders [59–62]. Members of racial/ethnic minorities are more likely to be victims of workplace injustice and suffer more adverse outcomes than the demographic majority groups [61]. In this study, worksite discrimination reported by interviewees represents a social disparity that might compromise their wellbeing and health. The study also identified a disparity for accessing health care due to interviewees' lack of health insurance and financial resources, a common phenomenon among racial/ethnic minority workers [63].

Coping has been defined as "... constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing

or exceeding the resources of the person" (Lazarus and Folkman 1984, p. 141) [64]. It has been proposed that personal coping strategies could decrease the demands experienced and threaten to tax and reestablish equilibrium [65]. Our study found that Latina housekeepers employed a variety of coping strategies to alleviate their bodily pain and stress from work. Problem-focused coping methods, including wearing gloves, masks, or back-support belts, were used to reduce bodily pain caused by the physically-demanding cleaning work. Emotion-focused methods such as praying, crying, spending time with family and friends, taking walks, reading books, listening to music, and maintaining a sense of humor were adapted by our study sample to cope with work-related stress. This implies that the source of work-related stress may be outside the control of Latina hotel housekeepers; therefore, they could only rely on emotion-focused mechanism to reduce the negative emotional responses associated with stress. Previous research in the general population has shown that stressed or depressed individuals are more likely to engage in negative coping behaviors such as abusing drugs, alcohol, or tobacco [65, 66]. None of our study participants turned to negative coping strategies such as alcohol or substance abuse; however, this study did identify potentially problematic responses such as over-eating and nail-biting, indicating that some housekeepers may not know how to cope with stress in a healthy manner, which can put their mental health and emotional well-being at risk.

Social support is also considered a critical moderator to confer resilience to stress [67, 68]. The majority of participants reported receiving support from both supervisors and co-workers. The job strain model indicates that the combination of high job demands and low job decision latitude leads to negative physical and mental health outcomes [19, 45, 69]. Our sample of Latina hotel housekeepers often faced situations that were out of their control, such as late check-out guests or being assigned to

extremely dirty rooms, which contributed to time pressures that in turn caused great stress.

When our interviews were conducted, the majority of our participants were not currently experiencing severe physical or mental problems related to job stress. With regard to job satisfaction, slightly more than half (54 %) of the interviewees expressed satisfaction with their jobs and 23 % of the interviewees indicated that they were not satisfied with their current employment. The 54 % job satisfaction found in this study is lower than both Powell's Cardiff study on hotel housekeepers in Wales, UK, which reported that 74 % of the respondents were satisfied with their jobs [6], and the San Francisco study, which reported a job satisfaction of 79 % [36]. This low level of job satisfaction among the interviewed Latina hotel housekeepers may be a reflection of poor work conditions, such as low pay, heavy physical work, time pressure, discrimination, and unfair job assignments. For those who were satisfied with their current job, they might have grown accustomed to their current work conditions, not perceiving them as adverse. Alternatively, the positive coping mechanisms that participants adopted to deal with work stress might have alleviated the hardships they experienced at work. It is also possible that their educational backgrounds and personal financial concerns have constrained their career choices, and they simply accept their work conditions while enduring physical pain or other challenges due to lack of better options. Among immigrant workers, working even under negative conditions is often considered better than the alternative of being unemployed and unable to support one's dependents, both in the U.S. and back in one's home country.

Given our study's small sample size of 27 and limited number of hotels, our findings are not comprehensive. We did, however, find consistency between our study and two previous large-scale studies conducted at San Francisco and Las Vegas hotels to gauge housekeepers' perceptions of working in a physically demanding job, the time pressures associated with rooms, job stress, their experience of work-related pain, and job satisfaction [36, 37]. That our findings are consistent with previous large-scale studies about hotel housekeepers supports the validity of the current small-scale qualitative study. Even though this study was not able to depict the associations between poor work conditions, poor health, and severe pain, the Las Vegas study provided empirical evidence suggesting that the physical workload, time pressure, low job control, high psychological demands, and high job stress are associated with ill health or severe physical pain [37], which can be applied to this Latina group. Unlike previous studies, this study revealed the discrimination and mistreatment experienced by Latina hotel housekeepers, which can elevate their psychological job hazards, resulting in a higher risk

for ill health than their non-Latina counterparts. A longitudinal study tracking this group of interviewees might further contribute to a better understanding of the physical and psychosocial impacts of work conditions on Latina hotel workers' health and well-being.

Multi-Stakeholder Interventions and Directions for Future Study

In general, Latina hotel housekeepers' low socioeconomic status, legal immigration status, lack of English proficiency, and position at the bottom of the organizational hierarchy place them in disadvantageous situations. We suggest multi-stakeholder interventions to prevent and alleviate the work-related injuries and strains these workers often face. At the *legislative level*, enforcement of occupational safety standards is needed to address injuries among hotel housekeepers. Stakeholders and advocates need to establish relevant laws to safeguard the rights of immigrant groups.

At the *organizational level*, employers are legally obligated to protect the health and safety of their employees. This can be accomplished in a variety of ways: ongoing safety training; teaching proper cleaning techniques, positioning, posture, and body mechanics to reduce bodily injury; introducing positive coping skills to help employees alleviate stress and maintain mental health; procuring ergonomic cleaning tools and equipment; providing personal protective equipment; assigning a reasonable number of rooms based on the amount of cleaning required and the physical capabilities of the housekeepers; enforcing break times for physical recovery; and adopting non-toxic cleaning products. Replacing traditional caustic cleaning products with green products had a positive effect on immigrant workers participating in the Vida Verde Women's Co-Op program, which implemented an intervention to address some of the problems listed above [70]. It would also be beneficial for employers to provide benefits (e.g., paid health insurance, paid sick leave, paid vacation) and career-development training programs for housekeepers. It is imperative to offer supervisors diversity management training programs to ensure the best management of employees from different cultures. Overall, all housekeeping employees should be educated about their rights as workers and be treated in a non-discriminatory manner. Other suggestions for improvement of work conditions were made by study participants: assigning fewer rooms during a single shift or assigning rooms on the same floor, allowing more time to clean each room, providing sufficient cleaning tools and lighter vacuum cleaners, ensuring that all needed amenities and linens are available during the work shift, purchasing non-toxic cleaning products and ergonomic cleaning equipment, providing personal protective equipment

(i.e., gloves, masks), providing hand lotions or creams, ensuring equal and respectful treatment of all employees, and recognizing and rewarding employees' work. Participants also pointed out the need for pay increases, employer-provided day care services to minimize workers' worries about their children during work hours, benefits (i.e., paid sick leave, paid vacation, paid health insurance), and a resting room at the hotel property to recover from bodily pains.

At the *academic level*, the health of Latina hotel housekeepers remains a highly understudied topic. The difficulty we encountered in the initial data collection stage highlights the fact that members of low-wage and immigrant groups are hard-to-reach populations, which helps to explain why studies of Latina hotel housekeepers are largely absent from the hospitality and occupational health literature. It is worth noting that many published studies of immigrant populations have demonstrated success in reaching this group by partnering with community-based organizations [10, 71–74]. To better understand the complexity of Latina hotel housekeepers' occupational health, more research is needed. For instance, collecting baseline cross-sectional data would allow an investigation of the connections between Latina hotel housekeepers' work conditions and their occupational health. Future studies should also employ system science methodologies to deconstruct the socio-structural determinants of the elevated musculoskeletal disorders and psychosocial strains among Latina hotel housekeepers and identify high-leverage points to reverse deteriorating trends. Researchers can also conduct prospective studies to understand possible protective mechanisms for continued cardiovascular health among hotel housekeepers whose work involves regular and often strenuous physical activity. Future studies should also conduct a postural analysis to investigate the relationship between housekeepers' cleaning methods, their movements, and their bodily pain to develop efficient ergonomic processes that will allow them to clean rooms both efficiently and with less muscular strain.

Limitations

Although this study yields important insight regarding Latina hotel housekeepers' work conditions and their health and well-being, there were some inherent limitations in the design of this study. First, the investigation was limited to Latina hotel housekeepers currently working at small hotels with fewer than 150 rooms. Second, the sample size of 27 was small primarily due to the difficulty of recruiting immigrant workers with uncertain documentation status. This study was intended to serve as a pilot study for a subsequent prospective study to explore occupational health of this

population more broadly. In future studies, researchers plan to collaborate with community partners to expand the sample size through varied recruitment efforts and to ensure a good representation of Latina hotel housekeepers from different Latino nationalities to permit a greater depth to explore themes and sub-themes. The researchers plan to recruit sufficient participants representing 2-, 3-, and 4-star hotels to allow further comparison and to obtain a holistic picture of Latina housekeepers' work conditions and their occupational health. Third, qualitative data alone are unable to demonstrate the strength of associations or provide evidence of causality among variables. Future studies can use our findings as a framework and collect quantitative data to explore the relationship between the effect of work conditions and Latina hotel housekeepers' physical and mental health.

It would be beneficial to expand the sampling frame to Latina housekeepers at larger hotels as well as to former Latina housekeepers who have left hotel cleaning jobs to obtain their views about work safety and health. To further determine the health disparity related to race/ethnicity and nativity, future studies should include non-Latina hotel housekeepers as a comparison group. While work conditions appear to contribute to Latina housekeepers' bodily pains, work stress, and the risk of accidents and injuries in the workplace, the qualitative data collected in this study were not able to show the strength of associations among these variables, which could alternatively be accomplished by adopting a quantitative approach.

Conclusion

This exploratory study provides an overview of the physical, chemical, and social hazards experienced by a small sample of Latina hotel housekeepers from a southeastern U.S. city and the strategies they use to cope with physical difficulties, mistreatment, and other challenges in the workplace. More research on this underserved occupational segment is needed in order to improve their work conditions, their wellbeing, and their overall quality-of-life.

Acknowledgments Authors thank field researchers Matthew Frow and Laydy Pitta for their invaluable contribution to the study. Without their hard work and sensitivity toward the study population, this work would not have been possible. Authors also thank the Office of Research and Economic Development of the University of North Carolina Greensboro for funding the study.

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