Work-Related Pain and Injury and Barriers to Workers' Compensation Among Las Vegas Hotel Room Cleaners

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Objectives. We examined the prevalence of work-related pain and injury and explored barriers to and experiences of reporting among workers.

Methods. We surveyed 941 unionized hotel room cleaners about work-related pain, injury, disability, and reporting.

Results. During the past 12 months, 75% of workers in our study experienced work-related pain, and 31% reported it to management; 20% filed claims for workers' compensation as a result of work-related injury, and 35% of their claims were denied. Barriers to reporting injury included "It would be too much trouble" (43%), "I was afraid" (26%), and "I didn't know how" (18%). An estimated 69% of medical costs were shifted from employers to workers.

Conclusions. The reasons for underreporting and the extent of claim denial warrant further investigation. Implications for worker health and the precise quantification of shifting costs to workers also should be addressed. (*Am J Public Health.* 2005;95:483–488. doi:10.2105/AJPH.2003.033266)

The hospitality industry is a major employer of low-wage service workers. The second largest occupation in this industry is housekeeping, which comprises 26% of all hotel employees[1] and is characterized by a predominantly female workforce, repetitive physical tasks, low job control, low wages, increasing use of contingency employment, and few opportunities for career advancement.[2–4] There is evidence that low-wage jobs result in a high burden of illness, injury, and disability.[5–12] This burden falls disproportionately on workers who are multiply disadvantaged in society and who have been underrepresented and underserved in occupational health research.[8,13]

Hotel workers have higher rates of occupational injury and illness compared with workers in other service industries.[14] Research has shown that room cleaners have an elevated risk for musculoskeletal disorders (Krause et al., unpublished data, 1999).[3,15,16] Moreover, the hospitality industry has both upgraded guest services and implemented lean staffing and greater performance demands,[3,4] which may be associated with occupational injury.[3]

However, few epidemiological studies have focused on hotel room cleaners (Krause et al., unpublished data, 1999). Little is known about their work-related pain or injuries and their lost workdays. Previous studies showed that commonly used administrative measures do not capture the full range of occupational injury and lost workdays because of underreporting and re-injury.[12,17–23] Additional research is needed to understand the true prevalence of occupational injury and lost workdays among hotel room cleaners and other disadvantaged workers.

We examined the prevalence of work-related pain and injury and the reporting of pain and injury among 941 unionized hotel room cleaners in Las Vegas, Nev, who participated in an epidemiological study of working conditions and health. To design effective workplace interventions that take the dynamics of underreporting into account, nonadministrative data are needed on work-related pain, injury, and disability and the barriers to reporting. We examined several of these nonadministrative measures.

METHODS

Context of the Study

The study was a collaboration of the Culinary Workers Union Local 226 (Hotel Employees and Restaurant Employees Union) in Las Vegas, the Labor Occupational Health Program at the University of California, Berkeley, and the Department of Medicine at the University of California, San Francisco. The collaboration was initiated by the union in 2000 because of its concern about working conditions for 1 of its largest constituencies, hotel room cleaners. The project was presented to the union membership as a union-sponsored scientific study by the University of California. The balance between scientific integrity and union sponsorship was illustrated by the union leaders' explicit commitment to accept whatever findings the study produced.

Study Design and Population

We followed models of participatory action research[24] in which hotel room cleaners were involved in all aspects of the project, including the formulation of research questions, study design, survey development, implementation of the study, and interpretation of results; 26 room cleaners participated in an advisory group throughout the project. A detailed report of this participatory process has been published (Krause et al., unpublished data, 2002).[25,26] Briefly, through focus groups, room cleaners described their job tasks, daily schedules, work environments, and changes during the last 5 years. They identified physical and psychosocial job stressors (e.g., ergonomic problems, relationships with supervisors) and discussed their experiences with work-related injuries and reporting.

Union leaders chose 1 unionized hotel from each of 5 hotel types for our study: upscale, mid-level, all-suite, convention, and older economy. The sampling frame was 1724 room cleaners who were scheduled to work during the survey weeks. After exclud-

ing post–September 11, 2001, layoffs, swing- and night-shift workers, and workers who did not report to work as scheduled, 1276 employees were eligible to participate.

Instrument Development

The survey questionnaire was developed with the results of focus group discussions and with standardized instruments we used in an earlier study of San Francisco, Calif, room cleaners (Krause et al., unpublished data, 1999). A draft questionnaire was pilot tested with 30 room cleaners. The final 29-page instrument covered physical workload, psychosocial working conditions, ergonomic problems, interactions with medical professionals, health status and behavior, work-related pain and injury, and injury reporting. The room cleaner advisory council evaluated questions for content validity and reading level, and the questionnaire was translated into Spanish and Serbo-Croatian.

Data Collection

Surveys were administered at the union hall by university researchers during March and April 2002. This meeting room had separate entrances out of sight of union offices, and only university researchers, participants, and survey administrators were allowed to enter to ensure anonymity.

The survey administrators were local college students and room cleaners from nonparticipating hotels who had received a half day of training from the university researchers. Most administrators spoke Spanish, Serbo-Croatian, or 1 or more Asian languages, and they served as translators and read the questions to illiterate participants. Completion of the survey took 1 to 2 hours; completed surveys were collected by university researchers.

Measures

Prevalence of work-related pain was measured by asking, "Have you had any pain or discomfort during the past 12 months that you feel might have been caused or made worse by your work as a hotel room cleaner?" This question reflected the medical-legal criteria used by physicians to determine whether an injury is work-related (i.e., whether it was caused by work and whether it occurred during the course of conducting work duties, *or* whether these work duties aggravated a nonindustrial preexisting condition so that the aggravation resulted in disability or need for medical care).[27]

Respondents also were asked whether their pain or discomfort (hereafter referred to as "pain") began during their current job, whether they visited a doctor for this pain (a proxy measure for severity), whether they reported this pain to management, and whether they had used sick or vacation days for this work-related pain. Workers were then asked if they had taken pain medication during the past 4 weeks "for pain they had at work."

Reporting of having filed a workers' compensation injury claim was measured with 3 questions: (1) "How many work-related injuries or illnesses have you reported to workers' compensation since you began working at your current hotel?" (2) "Have you had a work-related injury or illness at your hotel that you did not report?" and (3) "Have you reported a work-related injury or illness to workers' compensation in the past 12 months?" Another question asked whether the claim was accepted or denied.

Barriers to reporting work-related pain or injury were identified in focus groups and were presented in the survey as checklists, where 1 or more responses could be checked. Workers who said they had work-related pain but did not report this to their supervisor were asked, "If no [did not report], why? (please check all that apply)," and they were presented with 10 items. Workers who said they had an injury at some time that they did not report to workers' compensation were asked, "Why not? (please check all that apply)," and they were presented with 4 items.

Five situations related to workers' experiences with reporting injury were presented to workers who said they had filed a workers' compensation injury claim. These situations included management responses to worker reporting and worker health after reporting (e.g., "Did you take a drug test when you reported the injury or illness?" and "Did you get well before you returned to work?").

Data Analysis

Participant characteristics, working conditions, health outcomes, and barriers to reporting were analyzed with descriptive statistics. University researchers conducted the data analysis with Stata statistical software, version 7.0 (Stata Corp, College Station, Tex).

RESULTS

Participation Rate and Characteristics of the Study Population

Of the 1276 eligible study participants, 941 completed the survey (response rate = 74%). All but 10 respondents were women, and most were middle aged (mean age = 41.7 years), racial/ethnic minorities (76% Latina, 10% Asian/Pacific Islander, 6% African American), and immigrants (85%) who had less than a high school education (65%). The vast majority (95%) had at least 1 child, and 59% had at least 1 child or elder who needed childcare or eldercare. Most respondents (92%) worked full time (mean = 42 hours per week). Respondents' years of working as a room cleaner ranged from 6 months to 46 years (mean = 7.7 years; median = 6.6 years).

Work-Related Pain

Work-related pain was experienced by 75% of respondents during the past 12 months (Table 1). Almost all (94%) said the pain began during their current job, 61% had visited a doctor for this pain, and 57% said they used sick or vacation time for this pain. Thirty-one percent reported this work-related pain to management. Additionally, 73% took pain medication during the past 4 weeks for "pain they had at work" (data not shown).

Workers' Compensation Reporting and Claim Acceptance

Table 2 shows the prevalence of reporting work-related injuries to workers' compensation. Twenty percent of respondents said they had reported a work-related injury to workers' compensation during the past 12 months; of these, 35% said their claim was not accepted. Since working at their current hotel, 35% reported at least 1 work-related injury to workers' compensation, and 18% said they had a work-related injury that they did *not* report. Of those who ever filed a claim at their current hotel, 54% said their claim was denied.

TABLE 1—12-Month Prevalence of Work-Related Pain, Disability, and Health Care Utilization (N = 941)

	Percentage	n/N
Had pain or discomfort caused by or made worse by work as hotel room cleaner during the past 12 months	75	710/941
Pain began during current job	94	665/710
Visited a doctor for this pain during the past 12 months	61	430/710
Used 1 or more days of sick or vacation leave for this work-related pain or discomfort during the past 12 months	57	402/710
Reported this pain or discomfort to management during the past 12 months	31	221/710

Note. n/N = number of affirmative responses/number of workers who were asked the question.

TABLE 2—Workers' Compensation Reporting and Claims Acceptance (N = 941)

	Percentage	n/N
Filed work-related injury workers' compensation claim during the past 12 months	20	184/941
Workers' compensation claim accepted[a]	46	85/184
Workers' compensation claim not accepted[a]	35	64/184
Filed at least 1 work-related workers' compensation injury claim since began working at current hotel	35	332/941
Workers' compensation claim accepted[b]	34	113/332
Workers' compensation claim not accepted[b]	54	178/332
Ever had work-related injury at current hotel that was *not* reported[c]	18	168/941

Note. n/N = number of affirmative responses/number of workers who were asked the question.
[a]Percentages do not add up to 100% because 35 workers (19%) who reported an injury during the past 12 months did not answer this question.
[b]Percentages do not add up to 100% because 41 workers (12%) who reported an injury since they began working at their current hotel did not answer this question.
[c]Seventy of these workers also said they filed a workers' compensation injury claim since they began working at their current hotel.

Barriers to Reporting Work-Related Pain and Injury

Table 3 shows workers' reasons for not reporting work-related pain to management or filing workers' compensation injury claims. Of the respondents who had work-related pain, 67% did not report it to management. The most frequently cited reasons were "I thought it would get better" (44%), "I didn't know I should" (35%), "too many steps to reporting" (23%), and fear of getting "in trouble" (13%) or "fired" (13%) (multiple reasons were often selected). "Other reasons" included the perception that management does not care, the perception that the pain is "part of getting older," and a reluctance to "lose work time."

The 168 respondents who did not report their injuries to workers' compensation selected the following reasons: "It would be too much trouble" (43%), "I was afraid" (26%), and "I did not know how" (18%). Some workers also said they did not report because they thought the injury would get better, they believed the injury was not covered by any insurance, or they did not want to "lose work time."

Experiences After Reporting an Injury

Table 4 shows workers' experiences after filing a workers' compensation injury claim. Of the workers who reported a work-related injury during the past 12 months, 86% were taken to see a health care provider. Thirty-two percent said they took a drug test, and 20% said they received a warning or discipline for missing work. Fifty-two percent said they did not recover completely from the injury before returning to work, and 34% said they missed additional days because of the injury after returning to work.

DISCUSSION

Work-related pain and injury were significant problems for the hotel room cleaners in our study. Three out of 4 workers (75%) experienced work-related pain during the last year, and the vast majority (94%) said the pain began during their current job. This work-related pain was considered severe enough for most workers to seek medical attention or take days off. The data also show that these workers faced numerous barriers to reporting work-related pain or injury and that there was substantial underreporting. Two thirds of the workers did not report their work-related pain to management during the past year, and 18% of the workers who had a work-related injury at some time did not file a claim with workers' compensation.

These findings are comparable to an earlier study of San Francisco hotel room cleaners, where 77% of respondents had work-related pain, 93% said this pain began after they started their current job, 50% said they reported this pain to management, 73% visited a doctor for this pain, and 23% filed a workers' compensation claim during the previous year (Krause et al., unpublished data, 1999). Research on other populations also has shown that only a small percentage of workers who have symptoms or diagnoses of work-related disorders actually file for workers' compensation benefits (Krause et al., unpublished data, 1999).[21,23,28]

On the other hand, the percentage of claims that were denied in our study (35%) is exceptionally high. For example, of the 2.6 million claims filed in California between March 2000 and June 2003, only 3.7% were denied (B. Kahley, research manager, California Division of Workers' Compensation; written communication, March 2004). During a longer time period, claim denial in our study may have been even higher than

TABLE 3—Barriers to Reporting Work-Related Pain and Injury (n = 941)

	Percentage[a]	n/N
Did not report work-related pain to supervisor or manager	67	477/710
I thought it would get better	44	212/477
I didn't know I should	35	167/477
Too many steps to reporting	23	111/477
We get in trouble if we get hurt at work	13	62/477
I was afraid I would get fired	13	63/477
Supervisor couldn't understand me	5	25/477
Coworkers told me not to	3	15/477
I didn't want to take a drug test	3	14/477
I didn't want to ruin the chance to win a safety prize	2	10/477
Other reason[b]	8	36/477
Did not report work-related injury to workers' compensation	18	168/941
It would be too much trouble	43	72/168
I was afraid	26	43/168
I didn't know how	18	31/168
Other reason[c]	21	36/168

Note. n/N = number of affirmative responses/number of workers who were asked the question.
[a]Percentages do not add up to 100% because multiple reasons could be selected.
[b]Includes the perception that management does not care, the perception that the pain is "part of getting older," and a reluctance to "lose work time."
[c]Includes the perception that injury will get better, the perception that the injury is not covered by any insurance, and a reluctance to "lose work time."

TABLE 4—Workers' Experiences After Filing a Workers' Compensation Injury Claim During the Past 12 Months (n = 184)

	Percentage	n
Taken to health care provider or clinic upon reporting	86	158
Took a drug test upon reporting	32	58
Received a warning or other discipline for missing work	20	37
Did not fully heal before returning to work	52	96
After return to work, missed additional workdays because of the injury	34	62

Note. n = number of affirmative responses.

35%, because of the 332 respondents who had filed a workers' compensation claim since working at their current hotel, 54% said their claim was denied.

Barriers to Reporting Work-Related Pain and Injury

Some of the reasons workers cited for not reporting work-related pain and injury suggest that the reporting process is complicated and burdensome for workers and poses risks to their job security. About ¼ of workers were concerned about eliciting a disciplinary or punitive reaction from management. For example, mandatory drug testing for those workers who report an injury is a tactic that can intimidate and embarrass workers and can serve as both punishment for and deterrent to reporting. The high denial rate of workers' compensation claims in our study may itself constitute a substantial barrier to reporting if claim denial has been experienced personally or shared among workers previously.

On the other hand, 44% of respondents said they did not report work-related pain because they believed the pain would subside, which suggests that workers may perceive "manageable" pain as less "reportable" than acute traumatic injuries. However, the high number of doctor visits for work-related pain, the widespread use of sick or vacation days for this pain, and the high level of pain medication usage suggest that most of the pain and injuries were substantially severe.

Economic Disincentives to Filing a Workers' Compensation Claim

Workers face several economic disincentives to filing a workers' compensation claim. For example, there is an unknown amount of time between reporting an injury and actually receiving any benefits, which may pose a financial hardship, especially for low-wage workers. Another financial hardship is the burden of medical bills not covered by health insurance as long as a claim is disputed. Workers may therefore choose not to file a claim and instead use sick or vacation days to attempt to heal. Even if the claim is accepted, wage replacement benefits are considerably lower than regular take-home pay (two thirds of the gross monthly wage).

Study Limitations

There are several limitations to our study. First, the findings cannot be generalized to the larger population of hotel room cleaners because (1) the results are based on unionized hotels only and (2) circumstances may differ by region and by employer. The degree of fear of being disciplined or fired could be higher among nonunion hotels, where workers lack protection by their union and negotiated labor contracts. Unionized workers may have greater support and better information about occupational injury and filing workers' compensation claims than nonunionized workers. Therefore, among nonunionized workers, barriers to and consequences of reporting work-related pain or injury may be much more severe than reported in our study. However, within the selected hotels in our study, the participation rate of 74% suggests that study participants were representative of the eligible workforce, which makes selection bias unlikely.

Another limitation is that our study assessed work-relatedness of pain or injury

(and the severity of these conditions) by self-report rather than by medical or administrative records. Data were not available to validate doctor visits for work-related pain or workers' compensation claim reporting and acceptance rates. Recall may have been influenced by such factors as negative affectivity[29] or the presence of pain.[30] On the other hand, self-reports can be a more reliable source for determining the frequency of work-related pain. In fact, our study adds to an extant body of evidence that workers' compensation claims data do not fully capture the prevalence of occupational injury and work disability,[12,17–23] especially among vulnerable low-wage populations (Krause et al., unpublished data, 1999).

Implications for Worker Health

Among workers who did report an injury, data suggest not only punitive responses from management but also inadequate compensable time off from workers' compensation, inadequate medical care, and failure to remediate workplace hazards. Fifty-two percent said they did not heal before returning to work, and 34% said they missed additional workdays because of the injury after returning to work. Furthermore, among workers who did not have compensable time off, financial burdens may have compelled them to return to work too early—and risk re-injury and additional lost time later—which has been reported by Pransky et al.[31]

In addition to the barriers reported in the survey, focus groups further revealed barriers to adequate care, including discouragement by medical providers to report an injury and the burden of medical bills. Anecdotally, some physicians, especially orthopedic specialists, refuse to treat workers' compensation patients; therefore, injured workers may not get optimal treatment. Thus, survey data and qualitative data from the focus groups suggest that despite the explicit regulations for work-related injury and illness, compliance with legally mandated reporting, provision of adequate medical treatment, and disability compensation are low.

Workers appear to prefer dealing with work-related pain on their own rather than risk loss of income, out-of-pocket medical expenses, or hostile or punitive responses from management. Underreporting of injuries[32] inadequate or delayed care,[33] and failure to recognize and address hazardous working conditions can lead to the work-related health condition worsening and becoming chronic.[34]

The high level of pain medication usage for "pain at work" suggests that chronic conditions may be widespread among this population. While we acknowledge that some of this pain may be unrelated to work, it is unlikely that the entire 73% who reported taking pain medications during the past 4 weeks for pain at work took these medications because of causes unrelated to work. Clearly, our study results show that many workers are working while in pain, and they manage their pain with self-medication and sick or vacation days.

Our data also show that room cleaners may be at an elevated risk for occupational injuries compared with hospitality workers at large and the service sector in general. In our study, the worker-reported rate of injuries filed with workers' compensation during the past 12 months was 26.9 per 100 full-time equivalents (FTE). According to employers' reports in the Occupational Safety and Health Administration logs, this rate is 4 times higher than the national incidence rate of 6.6 per 100 FTE[14] and the Nevada rate of 6.3 per 100 FTE[35] for nonfatal occupational injury and illness in the Hotels and Other Lodging industry. It is nearly 6 times higher than the national incidence rate of 4.6 per 100 FTE for jobs in the service sector. The significantly higher incidence rate of self-reported injuries in our study suggests substantial underreporting by either workers to employers or employers to Occupational Safety and Health Administration.

Underreporting shifts the cost away from the employers' liability insurance. Of the 430 workers who visited a doctor for work-related pain, only 128 (31%) filed any claim with workers' compensation. In effect, this shifts 69% of medical care costs from employers to workers. Such shifting of cost is bound to increase the overall cost of employee health insurance, which in turn may lead to employers' pressure to increase employees' share of this cost. This is a frequent point of contention in contract negotiations for unionized workers and is a major barrier for low-wage workers who want to participate in employer's health plans, especially in nonunionized workplaces.

Conclusions

Our study has identified reporting barriers that need to be addressed in workplace interventions, especially among low-wage workers. Additional research is needed to determine how to reduce underreporting, and the research should include the perspectives of supervisors, other management personnel, and insurance carriers. Previous research has shown that encouragement of early reporting of work-related injuries and supportive work modifications for injured workers can reduce the burden of illness and disability among all parties involved: workers, employers, and insurance companies.[32,34] Future studies should quantify the extent of workers' use of sick or vacation leave for work-related pain or injury and the shifting of cost from employer liability insurance to employee health insurance or out-of-pocket expenses. Such information is necessary for negotiating appropriate financing of employee health plans, and it could be instrumental in addressing workplace hazards and reducing the burden of injury among the high-risk population of hotel room cleaners. ■

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Contributors

T. Scherzer contributed to the conceptual development, conducted data analysis, and wrote the article. N. Krause originated the study, provided advice on data analysis, and helped write the article. R. Rugulies contributed to the conceptual development and helped conduct data analysis and write the article.

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Human Participant Protection

This study was approved by the institutional review boards of the University of California, Berkeley, and the University of California, San Francisco.

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