Ann Occup Environ Med. 2022 Oct 25;34:e29
https://doi.org/10.35371/aoem.2022.34.e29
eISSN 2052-4374

Annals of Occupational and Environmental Medicine AOEM

Original Article

# Hotel housekeepers and occupational health: experiences and perceived risks

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**Received:** Jul 11, 2022
**Revised:** Sep 8, 2022
**Accepted:** Sep 25, 2022
**Published online:** Oct 25, 2022

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**Abbreviations**
EU-OSHA: European Agency for Safety and Health at Work; FG: focus groups; IPE: individual protection equipment; MSD: musculoskeletal disorders; PC: primary care.

## ABSTRACT

**Background:** Hotel housekeepers are one of the most important occupational group within tourism hotel sector; various health problems related to their job have been described, above all musculoskeletal disorders. The objective of this study is to understand the experiences and perceptions of hotel housekeepers and key informants from the Balearic Islands (Spain) regarding occupational health conditions and the strategies employed to mitigate them.
**Methods:** A qualitative study was carried out. Six focus groups with hotel housekeepers and 10 semi-structured interviews with key informants were conducted. Next, we carried out a content analysis.
**Results:** Hotel housekeepers reported musculoskeletal disorders, anxiety and stress as main occupational health problems; health professionals underscored the physical problems. Hotel housekeepers perceived that their work (physically demanding and with repetitive movements) caused their health conditions. To solve health issues, they used medication (anti-inflammatory agents, painkillers, sedatives and anxiolytics), which allowed them to continue working; health public services, generally rated as satisfactory; individual protective equipment; ergonomics (with difficulties due to high work pace and hotel facilities) and physical activity. Two contrasting attitudes were identified regarding sick leave: HHs who refused to accept a doctor-prescribed sick leave (due to fear of being fired, sense of responsibility, ...), and those who accepted it (because they could not continue working, they prioritised health before work).
**Conclusions:** Our results might contribute to plan improvement strategies and programs to address health problems among hotel housekeepers. These programs should include interventions, such as coping strategies for the work-related risk factors (i.e., stress) and strategies to reduce medicine consumption. Additionally, hotel facilities should adopt policies focused on making workplaces more ergonomic (i.e., furniture) and to diminish the work pace.

**Keywords:** Hotel housekeepers; Occupational health; Qualitative research; Perceived health

## BACKGROUND

Tourism-related jobs occupied 13.4% of the active population in Spain and 25.6% in the Balearic Islands in 2019. Within the tourism hotel sector, hotel housekeepers are one of the

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**Funding**
This research is part of a wider Project, "Hotel housekeepers and health," which is funded by Sustainable Tourism's Tax Fund (Balearic Islands Government), grant number ITS'17-096. The funders had no role in the design of the study; in the collection, analysis, or interpretation of the data; in the writing of the manuscript, or in the decision to publish the results.

**Competing interests**
The authors declare that they have no competing interests.

**Author contributions**
Conceptualization: Chela-Alvarez X, Llobera J; Data curation: Chela-Alvarez X, Garcia-Illan E; Formal analysis: Chela-Alvarez X, Garcia-Illan E; Funding acquisition: Llobera J; Investigation: Chela-Alvarez X, Bulilete O, Vidal-Thomàs M; Methodology: Chela-Alvarez X, Llobera J; Project administration: Chela-Alvarez X, Llobera J; Resources: Llobera J; Supervision: Bulilete O, Vidal-Thomàs M; Validation: Vidal-Thomàs M; Writing - original draft: Chela-Alvarez X, Bulilete O; Writing - review & editing: Chela-Alvarez X, Llobera J.

most important occupational group.[1] An estimated 13,000 hotel housekeepers work in the Balearic hotel industry, an exclusively female sector in Spain.[2]

Most hotel housekeepers in the Balearic Islands have recurring fixed-term contracts, being employed between 6 and 9 months every year, more intensively during the summer months. Hotel housekeeping is considered physically demanding, consisting of cleaning and tidying rooms, bathrooms and common areas of hotels. Occupational health risks associated with hotel housekeeping are dominated by musculoskeletal disorders (MSD) such as low back[3-7] and cervical, shoulder, hands, wrists and knee pain.[1,5,8,9]

Physical risk factors associated with MSD include: 1) Use of excessive force for lifting and moving weights—such as furniture and mattresses; 2) Forced and awkward postures[4,5,7,8,10,11]—adopted while making beds, when there is not enough room to follow ergonomic recommendations, cleaning the toilet, etc.; 3) Manual loading of objects[12]—including cleaning products, linen, towels and amenities to be replaced; 4) Tasks that involve elevation of the limbs or repetitive movements—i.e. when cleaning windows and shower screens; and 5) Insufficient breaks.[8,13]

Hotel housekeepers are at high risk for MSD. The higher incidence of MSD reported in women is caused by social rather than biological differences. The horizontal and vertical segregation of the labour market concentrates women in jobs with high time pressure, heavy workload[9,13,14] and involving repetitive tasks.[15] Additionally, the workplace and equipment are usually inadequate: the design is based on male anthropometric characteristics and is often heavy and difficult to move.[9,15,16] Psychosocial hazards are related to the imbalance between demands, resources and control; mistreatment; unfair assignment of tasks.[13,17] Also hotel workers perceive that the organization of their work (i.e., time pressure, work overload, inadequate work equipment) has a negative impact on their physical and mental health.[9,17-19] Effort-reward imbalance has been associated with MSD[20] and with a worse perception of health among hotel housekeepers,[21,22] whose job is demanding, with a low decision margin and few rewards.[17,23,24]

Other occupational exposure of hotel housekeepers include chemical (contact with cleaning products can cause respiratory symptoms such as nasal irritations and cough; and skin rashes outbreaks)[9,20,25] and biological hazards (contact with broken windows, needles or human waste increases the risk of workers' infection).[26]

All these exposures translate into frequent visits to the family doctor mainly due to musculoskeletal conditions,[1,8,27,28] anxiety and stress.

Some strategies undertaken by hotel housekeepers when they feel unwell are the use of individual protection equipment (IPE) (i.e., gloves, masks and goggles), self-medicating and consulting public health services or mutual labour health organisations—in charge of healthcare derived from professional contingencies and health leaves of working population— from which hotel housekeepers do not always obtain satisfactory responses.[2,9,14]

The objective of this study is to explore the experiences and perceptions of hotel housekeepers regarding health conditions and their causes, the strategies used to solve them, and the social context in which they occur. Interestingly, compared with other occupations, few studies focus on the health problems of hotel housekeepers. Similarly, little evidence is

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found on the hotel housekeepers' perception and experiences related to health problems. Our study will provide a foundation for improving the occupational health care for these workers.

# METHODS

We conducted a qualitative study. We carried out 10 semi-structured interviews with key informants (**Table 1**), which provided different perspectives about hotel housekeepers' job and their health problems. Additionally, 6 focus groups (FG) with hotel housekeepers were carried out to generate direct information about their job, the association of their health experiences with their occupation, and identified shared views. FG and interviews were moderated by the first author and were carried out between February and June 2018. The study setting was primary care (PC) centres of the Balearic Islands.

Intentional sampling was used to select key informants from different unions, associations and hotels, and to obtain rich information. The interviews lasted between 25 and 80 minutes.

Intentional sampling was also used to select hotel housekeepers for the FG. Family doctors from different PC centres (4 on different tourist hubs of the island of Mallorca, 1 in Menorca, and 1 in Ibiza) identified potential participants, informed them about the study and asked their permission to cede their telephone number to the researchers. Those who agreed to be contacted were phoned by the research team, were offered to participate and were informed about the date for the FG. Inclusion criteria were being over 18 years of age and having worked as hotel housekeeper during the previous season. Different participant profiles based on age, years worked as hotel housekeepers, hotel star rating, and type of contract were included. The FG were performed in PC centres and lasted between 60 and 90 minutes.

A total of 64 hotel housekeepers were contacted and invited to participate: 20 refused to participate; 10 had agreed to participate but did finally not come to the FG. Thirty-four hotel housekeepers participated in FG (between 4 and 8 in each 1): more than a half were 50 to 60 years old, 60 per cent had worked in the industry for 15 years and over, most of them had a recurring-seasonal contract and worked in 3- or 4-star hotels (**Table 2**).

**Table 1.** Profiles of key informants

| Code | Profile | Gender | Tasks |
|---|---|---|---|
| HHi1<br>HHi2 | Hotel housekeepers union members | Women | |
| HHi3<br>HHi4 | Hotel housekeepers members of hotel housekeepers associations | Women | |
| EHK | Executive housekeeper | Women | In charge of the daily organization and distribution among hotel housekeepers of hotel housekeeping tasks. |
| GP | General practitioner in a health centre of a touristic area | Women | General practitioner working in a public health centre in an area with lots of hotels. |
| OHS | Occupational health specialist in public health service. | Women | Medical practitioner working in the public service in charge to evaluate people's long sick leave episodes. |
| HHRR Dir. | Human resources director of a hotel chain | Women | In charge of planning and coordinating human resources of the hotel. |
| Prev. Dir | Director of prevention of occupational risk services in a hotel chain | Men | Medical practitioner in charge of the medical part of the prevention service in a hotel chain. |
| OHM | Occupational health manager of a hotel chain | Men | In charge of the service that analyse the different jobs performed in the hotel and its risks in order to take care of the workers' health. |

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**Table 2.** Socio-demographic characteristics of focus groups participants (%)

| Variables | Values |
|---|---|
| Age (mean, 50 years; SD = 10) (n = 34) | |
| Under 30 | 2 (5.9%) |
| 30 to 49 | 7 (29.4%) |
| 50 to 60 | 21 (52.9%) |
| Over 61 | 4 (11.8%) |
| Years in the industry (mean, 19.47, SD = 11.5) (n = 34) | |
| Under 10 | 6 (17.6%) |
| 10 to 14 | 7 (20.6%) |
| 15 to 24 | 11 (32.4%) |
| 25 years and over | 10 (29.4%) |
| Type of contract (n = 34) | |
| Permanent | 1 (2.9%) |
| Recurring fixed-term | 30 (88.2%) |
| Temporary | 3 (8.8%) |
| Hotel star rating (n = 33) | |
| 2 Star | 2 (6.1%) |
| 3 Star | 15 (45.5%) |
| 4 Star | 14 (42.4%) |
| 5 Star | 2 (6.1%) |

Interviews with key informants were conducted individually, except those with hotel housekeepers' members of hotel housekeepers associations (HHi3 and HHi4) in which 2 people were interviewed together. Participants were given the information sheet and signed the informed consent form before the start of the interview and the FG. Participants were informed that they could withdraw from the study at any moment without any consequences and their contributions were confidential. The interviews were audio recorded and the FG were video recorded as well to facilitate their transcription. After 6 FG and ten interviews, data saturation was established since no new relevant data was being generating.[29]

Based on previous studies and the objectives of the project, the dimensions explored in the interviews and the FG were: 1) Characteristics, organization and perception of the hotel housekeepers' job; 2) Description and perception of health issues; and 3) Strategies used to solve health issues. We developed different scripts to explore each dimension according to the interviewee.

The content of the FG and the interviews was transcribed verbatim. An alphanumeric code was assigned to each hotel housekeeper to ensure confidentiality. Each contribution was identified with "HH" and with 2 numbers separated by a period (the first indicates the FG, and the second, the participant). Key informants were also assigned a code (**Table 1**).

We undertook thematic analysis as defined by Braun and Clarke (2012).[30] The contents of the FG and the interviews were analysed together in order to detect similarities and differences in the narratives. Based on the reading of the transcripts of FG and interviews and the objectives of the study, the researcher (XCA) produced a code tree, which was evaluated by a second researcher (EGI); an agreement on it was reached. To ensure internal validity the 2 researchers coded and analysed the transcripts separately. Finally, the analysis of each code was shared and a consensus was reached regarding the conclusions. NVivo11 software was used for the analysis.

### Ethics statement

The study was approved by the Balearic Islands Research Ethics Committee (IB3738/18 PI). Participants were given the information sheet and signed the informed consent form before the start of the interview or the FG.

## RESULTS

**Table 2** shows the sociodemographic characteristics of the hotel housekeepers participating in the FG. **Table 1** shows the profile of interviewed key informants.

### Perceived occupational health problems

Hotel housekeepers described health problems located in the neck, back, hip, lower back, wrists and hands. The main diseases reported were tendinitis, carpal tunnel syndrome, arthritis, osteoarthritis, allergies, tendon rupture, sciatica, anxiety and stress. Hotel housekeepers underscored stress, anxiety and MSD as occupational health problems, whereas health professionals emphasised only the physical conditions. The most important factors perceived as stressors by hotel housekeepers were high demands (work overload, time pressure, physical burden), lack of enough resources and little control provoked mainly by role conflict and unexpected events to be attended. These findings and the coping strategies used by hotel housekeepers were described in depth elsewhere.[19]

Hotel housekeepers attributed these ailments and diseases to repetitive movements (making beds, scrubbing, cleaning windows), to pushing the housekeeping cart and to getting hurt with the hotel furniture as a result of working under time pressure: *"The diseases in the back, shoulder pain and joint pain result from doing the same movements day in and day out and year after year"* (HHi4). Also, they attributed their respiratory problems and allergies to cleaning products. Hotel housekeepers' perception about the characteristics of their work being the main cause of the diseases they suffered was shared by the director of the prevention service interviewed. Despite this perception, some hotel housekeepers explained that their pain did not improve during the months off work.

In contrast, based on his experience, the occupational health specialist interviewed considered that these diseases were common and not occupational in older hotel housekeepers; however, the job challenges caused an early presentation of these conditions: *"For the older women, these are common diseases. I mean, it's degeneration. Which is probably accelerated by the intensive work they do during 6 months"* (OHS) (**Table 3**).

**Table 3.** Verbatim illustrating results for 'Perceived occupational health problems' section

| Results |
| --- |
| *EHK: Because we get this at work, this is not a common disease. Low back pain, it can hit you once, but the second, the third, the fourth, many girls here have the same.* |
| *Prev. Dir: The main [pathologies] I see in PC are diseases... spine, upper limb, shoulder, knee,...* |
| *Moderator (M): What do you think causes these MSD?* |
| *Prev. Dir: Well, the type of work they do.* |
| *HH6.2: The liquids are causing us allergies.* |
| *HH4.5: What you don't have [is] fatigue. But the pain is still there, [both] in winter and summer.* |

## Strategies used to solve health issues

The main strategies of hotel housekeepers to solve health issues were: medication, physical activity, IPE and ergonomics.

Hotel housekeepers reported mostly using anti-inflammatory agents and painkillers and, to a lesser extent, sedatives and anxiolytics: *"And I self-treat with pills, waiting for it to hurt a lot so I don't have so many drugs in my body. I'm fed up of medicines"* (HH5.2). These medications allowed them to continue working. This was corroborated by health professionals and the director of the prevention service interviewed, who underscored that medication use increased with age.

Some hotel housekeepers stated that they only used IPE when suffering from specific health problems or on particular occasions (i.e., cleaning for the opening of the hotel). They also mentioned the difficulties of using IPE due to the fast work pace and the discomfort of wearing mask and goggles. Consequently, hotel housekeepers looked for different strategies to use them, such as wearing gloves in only one hand: *"The gloves are another problem, you don't find the time to put them on. I only put them on my right hand, the hand I use the most for scrubbing"* (HHi2).The use of gloves was frequently reported, whereas the use of mask and goggles was scarcely mentioned.

Hotel housekeepers explained that they received training in ergonomics and that they were willing to follow the recommendations. However, the following barriers to ergonomics were identified:

- Characteristics of the rooms' furniture, furniture arrangement, and customers' belongings. Extra beds added difficulties: "The double bed, the bed of another child, the bed of another child, of the baby, and the extra crib. All this in only one room. How do you do [clean] that? We start [cleaning] from the inside out, with all the bad postures you can imagine" (HH3.1).
- Work rhythm.
- Characteristics of the housekeeping carts combined with facilities often inadequate for the mobility needs of hotel housekeepers.

The occupational health specialist pointed out that postural hygiene, physical activity and medication were 3 strategies to improve MSD.

Some hotels' occupational health services, being aware that MSD were a major health issue, had organised guided stretching sessions before starting the working day, or were planning redesigning the furniture to improve ergonomics.

Finally, a few hotel housekeepers perceived physical activity as a strategy to improve their health. They reported doing more exercise during the winter months when they were not working, mainly walking (**Table 4**).

## Use and assessment of health services

The most commonly reported practice, corroborated by health professionals, was to attend PC services during the summer months for acute diseases—musculoskeletal or psychological. During the winter months, hotel housekeepers went for gynaecology, trauma and ophthalmology check-ups.

The majority of hotel housekeepers made little use of the mutual labour health organisations: they perceived that unless they were in serious pain or illness they would not be adequately

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**Table 4.** Verbatim illustrating results for 'Strategies used to solve health issues' section

| Strategies | Results |
|---|---|
| Medication | *M: When you have a health problem, what do you do?* |
| | *HH2.2: Take pills and go to work.* |
| | *Prev. Dir: The younger don't take anything yet. But hotel housekeepers over 40, over 50, who have been working in hospitality for over 20 years, they have to take some medicines.* |
| Individual protective equipment | *HH5.4: I have not used a mask ... now I'm trying to use it for this cough in the throat.* |
| Ergonomics | *HHi1: Because they [the prevention of occupational risks personnel] say that more than this [shoulder height] we should not raise our hands. But what do you do with large windows? You have to do it whether you want it or not. Otherwise, you leave half uncleaned.* |
| | *HHi4: Cleaning fifteen apartments a day with four, five or six beds each, where do you get the time to make an ergonomic move? We know how you have to bend down to tuck in the bed to avoid back pain. But when you have so much work it's impossible.* |
| | *HHi1: The housekeeping cart... is heavy. Pushing the cart full of linens, products, brush, mop, and everything.... Our wrists and shoulders are in very bad condition. In fact, our whole body.* |
| | *HHi3: In some hotels the housekeeping carts are in very bad condition.* |
| | *OHS: Postural hygiene is the most important. And some exercises that they have to learn and do as if they were the morning pill. Even though I'm tired, I have to go swimming for half an hour. And help them with pills.* |
| | *HHRR Dir: Last year before starting work, we asked workers to come and attend a 15 minutes stretching session with a coach that shows them how to stretch.* |
| | *OHM: Bedside tables are practically disappearing in some hotels, it is now a folding table. This facilitates cleaning; we try to influence the design.* |
| | *HH1.3: In winter I go to aqua gym, which is very good for my back. But in summer, with so much work, I don't have the strength.* |

cared for or prescribed sick leave. A minority of hotel housekeepers attended physiotherapy sessions, either from the public health system through doctor referral, or to a private service which they had to pay.

Hotel housekeepers' experiences about the medical care received by their family doctor at the PC centre were positive. However, when they were visited by a different doctor, some expressed complaints: they perceived that, because they were hotel housekeepers, doctors did not pay enough attention to their symptoms and did not feel understood. Hotel housekeepers perceived a lack of individualized care, believing that all hotel housekeepers were prescribed the same treatment: *"And we are all prescribed the same. All ibuprofen. We all take the same thing"* (HH4.7).

Reflecting on this issue, the occupational health specialist suggested that general practitioners should take into account that psychosocial conditions in the work environment could generate physical symptoms.

We identified that, generally, during the summer months hotel housekeepers went to the health centre on their days off. However, when due to lack of staff the hotel management unexpectedly changed their day off, they had to cancel their appointments: *"On Sunday they tell us our days off and sometimes they only tell us one; «you, you and you have these days off, I will tell the rest of you later on». Because I went to the director and told him: «I want to know in advance at least one of my days off, because if I need to go to the doctor, these are my personal affairs»* (HH5.1).

Most experiences reported when attending mutual labour health organisations were negative, mainly because care had been lacking (e.g., inadequate treatment, ignoring certain complaints, pressure to return to work,...).

However, a minority of hotel housekeepers were satisfied with the care received, especially because they had been on sick leave for as long as they considered necessary (**Table 5**).

**Table 5.** Verbatim illustrating results for 'Use and assessment of health services' section

| Strategies | Results |
| --- | --- |
| Attending to public health care services | *M: Do you go to the doctor?*<br>*HH6.5: When I find the time.*<br>*HH6.1: I just went to get injections [at the health centre].*<br>*HH1.2: To the doctor; we're not going to the mutual, huh? Because to get the sick leave you need a broken arm or lots of blood.*<br>*GP: [Hotel housekeepers] come a lot when they close the hotel. I have to catch up on everything; a consultation with gynaecology, a consultation with ophthalmology.... And during the working season they only come for acute conditions, generally musculoskeletal or psychological.*<br>*HH3.1: My doctor treats me very well, but when he refers me to a specialist, if I tell them that I never had that problem before doing that job, they should not tell me: «it's not related to your job. You possibly have arthritis, or possibly... ». I don't have any of that. «It's not caused by your job». They always tell you that it's your thing.*<br>*OHS: She [a hotel housekeeper] experiences it, she is in a lot of pain and feels awful. But often it's not the pain, but rather the mood influencing the experience.* |
| Days-off | *HHi4: You shouldn't be able to change somebody's day [off] from one day to the next. Because that person has plans, they have a life. Because you, in your days off you go to the doctor, or catch up on some paperwork in the city of Palma.* |
| Perception of the care received at mutual labour health organization | *HH4.6: In my last visit to the mutual, they told me I was discharged from my finger injury, but my finger is not ok. After two months it still hurts. According to her, I was fit to work after she told me: «Do this. Touch your fingers. You are ready to go back to work».* |

**Table 6.** Verbatim illustrating results for 'Sick Leave' section

| Results |
| --- |
| *HH2.2: You think the others will have to do my job, and it feels unfair.* |
| *HH1.1: [I was never on sick leave before] because I did not feel well for a few days but I could [keep working].* |
| *HH2.4: At first I refused to take it [sick leave], but I said no, I prefer my health.* |

### Sick leave

Two contrasting attitudes regarding sick leave were identified among hotel housekeepers;Group I,Refusal to accept or GroupII,Accepting a doctor-prescribed sick leave. Reasons given by Group I were: 1) Fear of being fired or of not being offered a contract renewal: "*I don't take it for fear of being fired"* (HH3.3); 2) Solidarity with their colleagues—the work of the person on sick leave was divided among the remaining workers; 3) Putting up with the pain through sense of responsibility; 4) Downplaying their pain; and 5) Potential repercussions on the retirement pension: *"Because I have heard that later on [if you are on sick leave a lot] they can deduct it from your retirement pension"* (HH2.1).

Hotel housekeepers who accepted the prescribed sick leave (Group II) considered it necessary for the following reasons: 1)They could not continue working; 2)They prioritised health before work; and 3)To ensure a better recovery (**Table 6**).

## DISCUSSION

This paper describes the experiences, perceptions and views of hotel housekeepers and key informants about the work of hotel housekeepers, their health problems and their strategies to solve them. Hotel housekeepers reported musculoskeletal problems, stress and anxiety, and attributed them to the tasks they performed daily at high pace. When having health problems, the most commonly reported strategies were use of: medication and health services. Other less commonly reported strategies were use of IPE, ergonomics and physical activity. Hotel housekeepers positively perceived public health care when treated by their family doctor, but were rather unsatisfied with specialist care.

Regarding health problems, hotel housekeepers equally emphasized MSD, stress and anxiety. In contrast, some key informants hardly mentioned stress and anxiety. Respiratory and

dermatological problems were less reported. A perception shared by most participants was the association between hotel housekeeping and MSD.

Various studies associate working conditions of hotel housekeepers with health problems.[14] The European Agency for Safety and Health at Work (EU-OSHA)[13] identified occupational physical risks, such as carrying heavy loads, which can cause MSD. Of the 941 hotel housekeepers interviewed by Krause et al.[7] in Las Vegas, 78% reported having had pain in the last 12 months; they perceived that the pain could have been caused or aggravated by their job. The authors concluded that pain was associated with significant physical effort and non-ergonomic work conditions. Buchanan et al.[27] conducted a study in 55,327 hotel workers (21% were hotel housekeepers) in the United States: estimated injury incidence rates in hotel housekeepers doubled injury rates of the other hotel workers.

Qualitative studies confirm the hotel housekeepers' perception of the relationship between their job and their health problems. In Kensbock et al.,[31] hotel housekeepers reported that the excessive physical demands of their jobs made them work daily with pain. Hunter Powell and Watson[32] collected the experiences of hotel housekeepers related to exposure to some risk factors, such as the use of cleaning products and the movement of the housekeeping cart. Hsieh et al.[9] interviewed hotel housekeepers, who associated MSD with repetitive movements carried out at work, and dry hands to the use of cleaning products. Chela-Alvarez et al.[19] described the unpredictability of the work of hotel housekeepers and its consequences on hotel housekeepers' stress. Unpredictability was related to the state of the rooms to clean, the unexpected events—i.e., a flood— to be attended by hotel housekeepers, not replacing hotel housekeepers in sick leave, etc. These characteristics had an impact on hotel housekeepers health. All these studies corroborate the information provided by the hotel housekeepers and key informants of our study.

Since women are usually in charge of domestic and care tasks, hotel housekeepers could be doubly exposed to physical and psychological stressors.[15] Additionally, women lack the time to recover from physical fatigue and to perform beneficial physical activity to prevent or improve MSD.[33] Previous results recently published corroborate that hotel housekeepers perceived that the high demands of their job caused work-life imbalance.[19] Usually, the demands of the job depleted their personal resources, depriving them of energy to attend to the demands of private life such as caring for dependents and enjoying family life and leisure.[34] This high level of perceived stress and the characteristics of the hotel housekeepers' job (high demands and low control) could partly explain the perception of the relationship between MSD and work.[35]

Some key informants interviewed attributed the prevalence of MSD to age. However, Krause et al.[7] contradict this perception, observing few significant differences in the relationship between age and pain, with only knee pain more common in older women.

Our results reveal strategies undertaken by hotel housekeepers for health issues, such as taking medication for pain, including anxiolytic agents. Similarly, Krause et al.[7] reported that 85% of hotel housekeepers ad taken some medication during the last 4 weeks due to pain while working.

Hotel housekeepers reported difficulties for following ergonomics recommendations due to time pressure and furniture arrangement, implying the prioritisation of job performance before their health. Bernhardt et al.[11] also reported the difficulty caused by time pressure


https://doi.org/10.35371/aoem.2022.34.e29

derived from the number of rooms to be cleaned. In the work of Krause et al.,[7] 75% of those surveyed stated that "my job requires working very quickly."

Generally, the availability of IPE was not a problem for hotel housekeepers working in the Balearic Islands, contrary to the findings of other studies carried out in a different setting.[24] However, the high working pace prevents hotel housekeepers to use properly this equipment.

When suffering from a health problem, some hotel housekeepers considered taking sick leave, or their doctor suggested it. However, many carried on with a "sickness presenteeism" (going to work while being ill) resulting from feeling pressured to go to work when sick.[36] Hotel housekeepers refused the prescribed sick leave for fear of being punished by the company or due to solidarity between workers.[37] Albarracín and Castellanos[38] stated that fear of unemployment has put pressure on workers after the economic crisis that began in 2007. Attitudes towards illness or pain and the choice of taking sick leave corroborated the experiences of hotel housekeepers from Las Vegas[1]: among the reasons for not communicating pain and work-related injuries, 44% believed that the pain would subside, and 26% declared that they were afraid of being fired or having "problems."

Hotel housekeepers consulted health services for acute conditions during the busier seasons (summer and spring). During the months that they did not work or when the work burden was lower, they requested appointments for preventive activities and consultations with specialists. Notably, the hotel housekeepers' use of health services was more determined by the labour market than by their health needs.

Similarly, the use of health services was influenced by the practice of changing days off, which transforms the worker into a subject/object on permanent stand-by to meet the needs of the productive system, without taking into account the needs of the personal and familiar domain. Companies do not assume the costs of having more staff to ensure worker's rights. Consequently, the employees' working conditions deteriorate. A workforce constituted almost exclusively by women in an "unskilled" job magnifies this conception of the worker.

Hotel housekeepers showed satisfaction with the care received in the PC centre, corroborating the findings of Arrazola-Vacas et al.[39] However, when they were not treated by their family doctor, hotel housekeepers perceived lack of empathy and considered that the encounter should be more personalised. Staff empathy, personalised treatment and communication with the doctor have been described as sources of satisfaction in PC users.[40-42] Besides, variables associated with quality of care are related with the health professional, information received, and trust in the doctor.[39]

Moreover, hotel housekeepers felt that of all health professionals, only their family doctor/nurse listened to them, a perception also described in the qualitative study by Arman et al.[43] According to the occupational health specialist interviewed, this feeling might respond to psychosocial aspects underpinning the health conditions of many hotel housekeepers, which could partly explain why expectations were not met by the health services as a whole; as expressed by Arman et al.[43]: "the combination of physical and mental health issues becomes a challenge in women's encounters with the health system."

People with moderate or high work-related stress use more frequently health services.[44] The tourism sector has been identified as one of the most stressful working environments[45];

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hotel housekeepers frequently consult health services with complex problems beyond musculoskeletal pain, but professionals tend to focus on the symptom without searching for the cause. Furthermore, some doctors attribute a psychosomatic origin to symptoms of musculoskeletal injuries in women, and fail to adequately treat the physical problem.[46]

Regarding limitations, there was a possible bias resulting from family doctors selecting FG participants: 1) Overrepresentation of the discourses of the hotel housekeepers with more health problems, because they attend the health centre more regularly and 2) Overrepresentation of the discourses of the hotel housekeepers with more job stability, since the family doctor may not know the temporary hotel housekeepers. Recruitment of young hotel housekeepers and hotel housekeepers with a temporary contract was difficult; their discourses are underrepresented. Recruitment unrelated to the company or trade unions made them feel safer when explaining their health and occupational experiences. Limitations intrinsic to qualitative studies are weak external validity of results; despite this, qualitative methods plunge deeply into the explanations of the phenomena and obtain rich information, what guarantee transferability of the results to other contexts.

## Conclusions

Hotel housekeepers perceived a clear link between the characteristics of their work and the diseases they suffered, above all, MSD, stress and anxiety. Besides being a physically demanding job, precarious working conditions, the little control hotel housekeepers have over their job, the unpredictability of the workload and not taking sick leave might lead to their health be deteriorated. Their main strategies to solve health issues were medication and physical activity; IPE and ergonomics could not be always followed due to work rhythm and hotel facilities.

Our results might contribute to develop integrated health programs aimed to improve the primary health care quality and the health of the hotel housekeepers. Occupational health is one of the mainstream priorities of public health services. Therefore, providing a comprehensive depiction of the perceptions of how the health of the hotel housekeepers is affected by their work can help governments to consider new policies focused on: (i) establishing at national level the workload standards of the hotel housekeeping sector in order to adapt the human resources needed to cover all the requirements of their job; (ii) implementing programs with intensive preventive measures and ensuring the ergonomic requirements of their jobs (i.e. teamwork, establishing breaks, etc.) in order to diminish hotel housekeepers' work pace, their work-related health problems and create healthier organizations; (iii) raising awareness and adherence to health promotion and prevention measures (i.e. physical activity, coping strategies for the work-related risk factors and to reduce medicine consumption, quit smoking, etc.) in order to counteract the negative impact of their job in their health.

Interventions addressed to health professionals should be oriented to increase the importance given to work-related stress and anxiety suffered by hotel housekeepers and thus better attend hotel housekeepers' health problems.

## ACKNOWLEDGEMENTS

The aim of the project "Hotel housekeepers and health" (ITS'17-096) is to make hotel housekeepers' health problems public and visible to society and administrations, as well as facilitating their empowerment through an intervention. We expect hotel housekeepers to be able to prevent the most frequent health problems and improve their quality of life and their psychological and social well-being. The results presented here correspond to a first phase of the project that seeks to explore the perceptions of hotel housekeepers and contribute to the design of a data collection questionnaire to estimate the frequency of health problems, exposure to occupational risk factors and the quality of life related to health, among others. We acknowledge the collaboration of all health care centres and general practitioners involved in the recruitment of the participants and the assistance provided in order to conduct focus groups and interviews. In addition, we acknowledge the participation of all interviewees.

## REFERENCES

1. Scherzer T, Rugulies R, Krause N. Work-related pain and injury and barriers to workers' compensation among Las Vegas hotel room cleaners. Am J Public Health 2005;95(3):483-8.
   PUBMED | CROSSREF
2. Cañada E. Too precarious to be inclusive? Hotel maid employment in Spain. Tour Geogr 2018;20(4):653-74.
   CROSSREF
3. Abdol Rahman MN, Muhamad Jaffar MS, Hassan MF, Ngali MZ, Pauline O. Exposure level of ergonomic risk factors in hotel industries. IOP Conf Series Mater Sci Eng 2017;226(1):012018.
   CROSSREF
4. Wami SD, Abere G, Dessie A, Getachew D. Work-related risk factors and the prevalence of low back pain among low wage workers: results from a cross-sectional study. BMC Public Health 2019;19(1):1072.
   PUBMED | CROSSREF
5. Rahman MNA, Jaffar MSM. Musculoskeletal symptoms and ergonomic hazards among room attendants in hotel industries. Hum Factors Ergon J 2017;1(2):24-33.
6. Jiménez Fernández MI, Cabanillas Moruno JL, Quintana Betancor A, Martín de la Coba I. Lesiones osteomusculares en camareras de piso del sector hostelería canario. Revista Digital Prevención 2010;(2).
7. Krause N, Scherzer T, Rugulies R. Physical workload, work intensification, and prevalence of pain in low wage workers: results from a participatory research project with hotel room cleaners in Las Vegas. Am J Ind Med 2005;48(5):326-37.
   PUBMED | CROSSREF
8. Wami SD, Dessie A, Chercos DH. The impact of work-related risk factors on the development of neck and upper limb pain among low wage hotel housekeepers in Gondar town, Northwest Ethiopia: institution-based cross-sectional study. Environ Health Prev Med 2019;24(1):27.
   PUBMED | CROSSREF
9. Hsieh YC, Apostolopoulos Y, Sönmez S. Work conditions and health and well-being of Latina hotel housekeepers. J Immigr Minor Health 2016;18(3):568-81.
   PUBMED | CROSSREF
10. Milburn PD, Barrett RS. Lumbosacral loads in bedmaking. Appl Ergon 1999;30(3):263-73.
    PUBMED | CROSSREF
11. Bernhardt A, Dresser L, Hatton E. The coffee pot wars: Unions and firm restructuring in the hotel industry. In: Appelbaum E, Bernhardt A, Murnane RJ, editor. *Low-Wage America: How Employers Are Reshaping Opportunity in the Workplace*. New York, NY, USA: Russell Sage Foundation; 2006, 33-76.
12. Fontani S, Mercuri I, Salicco R, Veratti S, Sorrentino L. Manual handling of loads in the hotel trade: the experience of the ASL (Local Health Unit) Milan. Med Lav 2010;101(6):437-45.
    PUBMED
13. European Agency for Safety and Health at Work (EU-OSHA). *Protecting Workers in Hotels, Restaurants and Catering*. Luxembourg: Office for Official Publications of the European Communities; 2008.
14. Cañada E. *Las Que Limpian Los Hoteles. Historias Ocultas de Precariedad Laboral*. 1st ed. Barcelona, Spain: Icaria; 2015.

15. Treaster DE, Burr D. Gender differences in prevalence of upper extremity musculoskeletal disorders. Ergonomics 2004;47(5):495-526.
PUBMED | CROSSREF
16. Messing K, Dumais L, Courville J, Seifert AM, Boucher M. Evaluation of exposure data from men and women with the same job title. J Occup Med 1994;36(8):913-7.
PUBMED
17. Hsieh YJ, Sönmez S, Apostolopoulos Y, Lemke MK. Perceived workplace mistreatment: case of Latina hotel housekeepers. Work 2017;56(1):55-65.
PUBMED | CROSSREF
18. Rosemberg MS, Tsai JH. Connecting gender, race, class, and immigration status to disease management at the workplace. J Health Dispar Res Pract 2014;7(5):13-31.
PUBMED
19. Chela-Alvarez X, Bulilete O, García-Buades ME, Ferrer-Perez VA, Llobera-Canaves J. Perceived factors of stress and its outcomes among hotel housekeepers in the Balearic Islands: a qualitative approach from a gender perspective. Int J Environ Res Public Health 2020;18(1):52.
PUBMED | CROSSREF
20. Lin N, Rosemberg MA, Li W, Meza-Wilson E, Godwin C, Batterman S. Occupational exposure and health risks of volatile organic compounds of hotel housekeepers: Field measurements of exposure and health risks. Indoor Air 2021;31(1):26-39.
PUBMED | CROSSREF
21. Burgel BJ, White MC, Gillen M, Krause N. Psychosocial work factors and shoulder pain in hotel room cleaners. Am J Ind Med 2010;53(7):743-56.
PUBMED | CROSSREF
22. Krause N, Rugulies R, Maslach C. Effort-reward imbalance at work and self-rated health of Las Vegas hotel room cleaners. Am J Ind Med 2010;53(4):372-86.
PUBMED | CROSSREF
23. Yap MH. Hotel housekeeping occupational. Tour Hosp Manag 2011;17(2):291-4.
24. Hsieh YC, Apostolopoulos Y, Hatzudis K, Sönmez S. Occupational exposures and health outcomes among Latina hotel cleaners. Hisp Health Care Int 2014;12(1):6-15.
PUBMED | CROSSREF
25. European Agency for Safety and Health at Work (EU-OSHA). Monitoring new and emerging risks. https://oshwiki.eu/wiki/Monitoring_new_and_emerging_risks#Combined_exposure_to_physical_and_psychosocial_risks. Updated 2017. Accessed Feb 20, 2019.
26. Hsieh YC, Apostolopoulos Y, Sönmez S. The world at work: hotel cleaners. Occup Environ Med 2013;70(5):360-4.
PUBMED | CROSSREF
27. Buchanan S, Vossenas P, Krause N, Moriarty J, Frumin E, Shimek JA, et al. Occupational injury disparities in the US hotel industry. Am J Ind Med 2010;53(2):116-25.
PUBMED | CROSSREF
28. Rosemberg MS, Li Y, McConnell DS, McCullagh MC, Seng JS. Stressors, allostatic load, and health outcomes among women hotel housekeepers: a pilot study. J Occup Environ Hyg 2019;16(3):206-17.
PUBMED | CROSSREF
29. Fusch PI, Ness LR. Are we there yet? Data saturation in qualitative research. Qual Rep 2015;20(9):1408-16.
CROSSREF
30. Braun V, Clarke V. Thematic analysis. In: Cooper H, Camic PM, Long DL, Panter AT, Rindskopf D, Sher KJ, editors. *APA Handbook of Research Methods in Psychology, Vol 2: Research Designs: Quantitative, Qualitative, Neuropsychological, and Biological.* Washington, D.C., USA: American Psychological Association; 2012, 57-71.
CROSSREF
31. Kensbock S, Jennings G, Bailey J, Patiar A. Performing: hotel room attendants' employment experiences. Ann Tour Res 2016;56:112-27.
CROSSREF
32. Hunter Powell P, Watson D. Service unseen: the hotel room attendant at work. Int J Hospit Manag 2006;25(2):297-312.
CROSSREF
33. Strazdins L, Bammer G. Women, work and musculoskeletal health. Soc Sci Med 2004;58(6):997-1005.
PUBMED | CROSSREF
34. ten Brummelhuis LL, Bakker AB. A resource perspective on the work-home interface: the work-home resources model. Am Psychol 2012;67(7):545-56.
PUBMED | CROSSREF

35. Herr RM, Bosch JA, Loerbroks A, van Vianen AE, Jarczok MN, Fischer JE, et al. Three job stress models and their relationship with musculoskeletal pain in blue- and white-collar workers. J Psychosom Res 2015;79(5):340-7.
PUBMED | CROSSREF

36. Holland P, Collins AM. "Whenever I can I push myself to go to work": a qualitative study of experiences of sickness presenteeism among workers with rheumatoid arthritis. Disabil Rehabil 2018;40(4):404-13.
PUBMED | CROSSREF

37. Onsøyen LE, Mykletun RJ, Steiro TJ. Silenced and invisible: The work-experience of room-attendants in Norwegian hotels. Scand J Hosp Tour 2009;9(1):81-102.
CROSSREF

38. Albarracín D, Castellanos ML. Las trabajadoras de los establecimientos hoteleros. Trayectorias. Sociol Trabajo 2013;77(5):27-45.

39. Arrazola-Vacas M, de Hevia-Payá J, Rodríguez-Esteban L. What factors help to explain satisfaction with Primary Health care in Spain? Rev Calid Asist 2015;30(5):226-36.
PUBMED | CROSSREF

40. Mira JJ, Rodríguez-Marín J, Peset R, Ybarra J, Pérez-Jover V, Palazón I, et al. Causas de satisfacción y de insatisfacción de los pacientes en hospitales y atención primaria. Rev Calid Asist 2002;17(5):273-83.
CROSSREF

41. Redondo Martín S, Bolaños Gallardo E, Almaraz Gómez A, Maderuelo Fernández JA. Perceptions and expectations on primary health care: a new form of identifying improvements in the care system. Aten Primaria 2005;36(7):358-63.
PUBMED | CROSSREF

42. Paddison CA, Abel GA, Roland MO, Elliott MN, Lyratzopoulos G, Campbell JL. Drivers of overall satisfaction with primary care: evidence from the English General Practice Patient Survey. Health Expect 2015;18(5):1081-92.
PUBMED | CROSSREF

43. Arman M, Gebhardt A, Hök Nordberg J, Andermo S. Women's lived experiences of chronic pain: faces of gendered suffering. Qual Health Res 2020;30(5):772-82.
PUBMED | CROSSREF

44. Azagba S, Sharaf MF. Psychosocial working conditions and the utilization of health care services. BMC Public Health 2011;11(1):642.
PUBMED | CROSSREF

45. Ariza-Montes A, Arjona-Fuentes JM, Han H, Law R. Work environment and well-being of different occupational groups in hospitality: Job Demand–Control–Support model. Int J Hospit Manag 2018;73:1-11.
CROSSREF

46. Valls Llobet C. *Mujeres Invisibles Para La Medicina*. Madrid, Spain: Capitán Swing; 2020.