WOMEN & HEALTH
https://doi.org/10.1080/03630242.2022.2140379

"The COVID 19 pandemic worsened my living and working conditions". A qualitative research study of female Brazilian immigrants in Oporto

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ABSTRACT

Immigrant women face a double vulnerability, being a woman and an immigrant, a situation that hinders their entry into the labor market and worsens their working conditions and occupational health with respect to the native population. The objective of these women is to seek employment or educational opportunities and improving their own lives and those of their families. All this is affected by the axes of gender, ethnicity, migration and socioeconomic level, as well as being confronted with the patriarchal structure of exercise of power and domination. These situations of inequality have aggravated due to the COVID-19 pandemic, worsening working conditions and their occupational health. This study aims to explore the working conditions of the female Brazilian immigrant population living in Porto (Portugal) and how these conditions may affect their health. Qualitative research through semi-structured interviews conducted during the second wave of the COVID-19 pandemic was used. The results show of them had work overload, manifesting anxiety and stress. Physical affectations related to poor work ergonomics and the lack of occupational health examinations in working immigrant women is highlighted. The importance of strengthening migration policies related to occupational health is highlighted. In pandemic situations, the vulnerability of these women increases, worsening their overall health.

ARTICLE HISTORY
Received 23 March 2022
Revised 14 September 2022
Accepted 5 October 2022

KEYWORDS
COVID-19; female; gender; immigrants; occupational health; working conditions

Introduction

International migration is a highly complex and widespread demographic movement in which migrants leave their own country and cross international borders. The reasons for migration vary in nature, with socioeconomic reasons, war, insecurity in the countries of origin, ethnic or racial discrimination or climatic disasters among the most common. Women migrants also escape gender inequalities or established cultural inequalities, such as the impossibility of accessing social and educational opportunities, or sexual violence, all of which affect their personal development, quality of life and personal safety. Underlying all these cases is the search for a better quality of life both for themselves and for the families they leave behind in their countries of origin (International Organization for Migration [IOM], 2019)

International migration is on the rise. The 272 million international migrants represent 3.5 percent of the world's population, 74 percent of whom are of working age (20–64 years), with female migration accounting for about half of the world's migrants (52 percent male and 48 percent female) (Owen 2020).

Despite the restrictions caused by the pandemic, the arrival of Brazilian migrants in Portugal has continued to grow in the last 4 years. According to the Immigration, Borders and Asylum (RIFA) report, the Brazilian community is the largest foreign community residing in Portugal (Foreigners and Border Service [SEF] 2021) for various factors: the historical background, the culture and the language which unites the two countries, all of which facilitate the integration of Brazilians in Portugal. (Borges et al. 2021).

The pandemic has posed a huge occupational health challenge, with workers in many sectors facing a high risk of becoming infected with the virus, due to the existence of a long list of jobs involving direct contact with the public and physical proximity to others (such as workers in bars, restaurants, shops, delivery services, as well as the health sector), which increases the risk of exposure to infected people due to the large number of daily contacts. However, there are also many cases where workers have the possibility of working from home, thus reducing the risk of contracting the virus (Benavides 2020; Burdorf, Porru, and Rugulies 2020).

In addition, the pandemic has also affected migrants' jobs and integration, as business closures and social distancing measures have had an impact on administrative procedures for residence and work permits, language acquisition and integration programmes (Santamaría, 2020).

In case of migrant women, the aim of many of them is to seek employment or educational opportunities and the possibility of improving their own lives and those of their families by sending remittances to their countries of origin, which in turn helps these economies to prosper. Known as "social remittances," they reshape norms, ideas, and behaviors through the social and cultural capital they bring. However, despite their valuable contributions, these migrants face widespread forms of discrimination intrinsically related to gender stereotypes and roles. These jobs, often related to the traditional female role, are generally invisible in character, and they receive lower wages than men working in the same conditions, with a wage gap of up to 145.36 euros (Oliveira 2018). In 74 percent of cases, they are limited to specific service sectors, such as domestic work, cleaning and the care of dependent people. Furthermore, it is worth noting that 26 percent of migrant women have university degrees and are employed in other sectors, such as financial institutions, science, academia, government or in hospitals and other health sector (Expansion Datosmacro Portugal, n.d.)

Therefore, this study aims to explore the working conditions of the female Brazilian immigrant population living in Porto (Portugal) and how these conditions may affect their health.

Material and methods

Design

This explorative and qualitative study was based on semi-structured interviews analyzed through thematic analysis (Braun, Clarke, and Hayfield et al. 2018), using a phenomenological perspective (Neubauer, Witkop, and Varpio 2019) and an ethnographic approach.

Sample and setting

The total sample consisted of 23 participants, all adult immigrant women living in Porto (Portugal) who were able to communicate in fluent Portuguese or English and had emigrated to Porto for different reasons, such as improving their working conditions.

The sampling was intentional and saturation criteria were used, as it was considered unlikely that new data (new categories or concepts) would be obtained in subsequent interviews (Urra, Muñoz, and Pena 2013).

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Supplemental data for this article can be accessed online at https://doi.org/10.1080/03630242.2022.2140379

Procedure

Purposive and snowball sampling were used to select the participants. One author e-mailed and phoned female immigrants to invite them to participate. Once the participants had given their consent, another author sent an email and formally invited them to participate. In addition, some with experience relevant to this study were invited directly. All the women accepted the invitation, except two, who unfortunately chose not to participate.

Data collection

Two authors conducted all the interviews, which were 45-minute semi-structured interviews. 25 women were contacted but finally 23 female immigrants agreed to participated in the study; only 2 women refused to participate for personal reasons.

The interviews were conducted between September 2020 and February 2021. Due to the "State of Emergency" for Covid-19, face-to-face meetings with the participants were not permitted. Therefore, the interviews were conducted online, at a time convenient to the participants, by telephone or videoconferencing platforms. Observational data was recorded as hand-written field notes.
The main categories of the semi-structured script were: *socio-labor characteristics, working conditions and occupational health*. A semi-structured interview guide was used (Table 1).

Data analysis

Thematic analysis was used, as outlined by Braun et al. (2018). Firstly, three authors familiarized themselves with the data. Another author transcribed the interviews, and another two authors read the transcripts and noted down each participant's comments about the guidelines. Secondly, one author coded any interesting features and developed the preliminary themes. Thirdly, this author discussed the preliminary themes with the other authors, and then proceeded to check the themes against coded data extractions.

Table 1. Topic guide.

Sociodemographic characteristics
Age, sex, children, who you live with, country of origin,
Educational level
Reason for migrating
Residence and working time in the municipal area of Porto
Socio-labor characteristics
Since arriving in Portugal, in which areas have you worked? What kind of work have you done?
Working conditions
Working relationship: Work situation
Working conditions (full-time or part-time, hours a week, overtime, shift work).
If unemployed, history of previous jobs in Portugal.
Exposure to occupational risk:
Physical and chemical biological risk (driving vehicles, handling machines or other dangerous tools, chemical products. . .)
Psychosocial risk: stress, sexual harassment at work (Do you know other people who suffered harassment at work or outside, and have received support?)
Company training of professionals to prevent occupational risk (characteristics, type of training and time).
Occupational health
Occupational accidents throughout working life in Portugal (description, type of accident, severity, healthcare required, impact on the job).
Frequency of occupational health examination, type of exams).
Leave from work (reason, time, impact on work).
Current health status (health perception, chronic health problems).
Health problems associated with work (new symptoms or aggravation of disease). Vaccination at the workplace.

Trustworthiness

This research followed the Consolidated Criteria for Reporting Qualitative Studies (COREQ) (Tong, Sainsbury, and Craig 2007). The methods used for guaranteeing quality were data triangulation, including participants with different sociodemographic characteristics, and the triangulation of data analysis via different researchers. (Aguilar Gavira and Barroso Osuna 2015) (See Appendix 1).

Ethical considerations

All the women included in the project agreed to participate voluntarily. They received verbal and written information about the study, as well as a letter of confidentiality signed by the research team before the interviews. In addition, the participants were informed that the interviews would be recorded by audio and quoted anonymously in publications, and that all personal identifying information would remain blinded. The study was approved (ANONYMIZE). Furthermore, this study fully complied with the provisions of the Declaration of Helsinki regarding research on human participants.

Results

Informants

The total sample consisted of 23 female Brazilian immigrants, with an average age of 45.6 years. Only seven participants had children, and one was pregnant. The educational level of the participants was 91.3 percent with university studies (Table 2).

Socio-labor characteristics

The authors asked about socio-labor characteristics, areas the participant had worked in and the kind of work they had done since arriving in Portugal. They also inquired about how their employers dealt with issues of occupational safety and health.

Working conditions

We wanted to inquire about the working conditions of the participants
In terms of working hours, all the interviewees reported having adequate working hours, with a 40-hour working week being the most common.
With regard to occupational risks, physical risk in terms of ergonomic problems was mentioned by 20 of the 23 participants, related to the mobilization of patients, forced postures and sitting down:

> *I3: The physical risk due to the effort made to mobilize overweight patients and mainly because we are now fewer nurses. I20 Physical risk, yes. I spend a lot of time sitting and working at the computer. I think that the greatest difficulties are related to posture and the time I spend sitting down.*

The interviewees reported that the physical symptoms worsened, especially in those who worked from home, since the company did not initially provide them with resources to maintain good postural ergonomics, and many of them obtained the resources on their own:

> *I14: It worsened my work situation because of my work material, chair, table and keyboard, it made me feel more back pain and increased my anxiety. I8: During COVID-19, I bought a chair with elbow rests to improve my back pain.*

As regards biological risk, the interviewees who worked in the health or service sectors recognize that they are exposed to risk:

Table 2. Participants' sociodemographic characteristics.

Participants (n=23)				
Interview	Age	Nationality	Education level	Time living in Portugal (years)
I1	32	Rio de Janeiro	Graduate Nurse	Time living in Portugal (years)
I2	33	São Paulo	Graduate Nurse	1.5 years
I3	42	Rio Grande do Sul	PhD Nurse	1.3 years
I4	30	Rio de Janeiro	Graduate in Communication and Business Sciences	2.3 year
I5	33	Río de Janeiro	Graduate in Business Sciences	1.6 years
I6	28	Brasilia, Distrito Federal, Brasil.	Masters Degree in Communication and marketing Master	1.3 years
I7	28	São Paulo	Masters Degree in Food engineering	1.8 years
I8	25	Rio Grande do Sul	Masters Degree in Publicity	1.6 years
I9	35	Rio Grande do Sul	Masters Degree in Communication and visual arts	1.6 years
I10	27	Itajaí, Santa Catarina	Tourism	3 years
I11	30	Río de Janeiro	Masters Degree in Business Sciences	5 years
I12	32	Belo horizonte – Minas gerais	Graduate Nurse	2.2 years
I13	33	Rio de Janeiro	Graduate Nurse	2.3 years
I14	27	Juiz de Fora, Minas Gerais	Masters Degree in Publicity	2 years
I15	47	Fortaleza	Secondary education	3 years
I16	37	Rio Grande do Sul	Masters Degree in Physical education	14 years
I17	50	Rio Grande do Sul	Podology	6 years
I18	56	Brasil, near São Paulo	Teacher	29 years
I19	46	Brasil, Minas Gerais	Physiotherapist with postgraduate degree in geriatric care	13 years
I20	45	Recife - Pernanbuco	Lawyer and Accountant	3 years
I21	40	Rio de Janeiro	Hotel Management and Fashion desinger	2 years
I22	30	Pirajú- São Paulo	Criminologist	6 years
I23	35	Porto Alegre- Rio Grande del Sur	Lawyer	14 years

I17: Yes, I work with secretions, blood, nails with mycosis and I use a machine that generates dust that can be inhaled. There is a risk of contagion by COVID-19.

I3: Yes, because of COVID-19, a lot of material is missing. Many colleagues are on sick leave because they have caught the virus. The hospital does not test regularly, only if you have symptoms, but many colleagues have not had symptoms.

In terms of the psychosocial risk, anxiety and stress are the main risks recorded by the participants:

I1: Psychosocial risk is more associated with anxiety and shift stress. I15: Yes, because we have to work with the public, you can never please everyone. There is stress because people are very demanding and sometimes we cannot resolve their problems, also because we lack support to be able to give them the answer they need.

Specifically, the subject of harassment at work was discussed, and some of the participants acknowledged having suffered it and related it to their condition of being a woman and being Brazilian:

I2: (. . .) I have also suffered harassment from fellow nurses, doctors, radiology technicians and patients, because I am a woman and a Brazilian. I12: I have been harassed a few times by clients who have had a few early morning drinks and because I am Brazilian there are always some words which are misinterpreted.

Occupational health

With regard to occupational accidents, only 3 admitted having suffered an accident, some did not report it and only one was on sick leave for this reason:

I7: Yes, I got a burn, but it was nothing serious. I also had pain in my arms from exerting a lot of force, but I do not consider it an accident. I13: Only the one in my arm, but I confess that I did not inform the company. I took care of it myself.

With regard to health surveillance, 10 of the 23 said that they had had an occupational health examination:

I2: Yes, there are yearly consultations with occupational medicine (. . .). I4: Yes, periodically. First, the occupational examination and then every two years it has to be done again.

Regarding the perceived state of health, mental health problems are those most frequently mentioned by the participants:

I2: I think that if I did not have the psychological care that I have, my psychological health would be more affected due to the workload and stress. I3: It is average. It is not good because I have pains in my body, in my neck and I have a lot of headaches because of anxiety, but it is not too bad, because I can still do my things.

In many cases, the health problems were related to the COVID-19 pandemic:

I6: Psychologically, I'm not too good because of the second wave of COVID-19. I20: An 8 out of 10, because during the pandemic I gained a lot of weight and I am not managing to lose it (. . .) My life is not like before (. . .). I22: I feel a little tired, I don't know if it is because of the pregnancy or if it is a side-effect of Covid that I had almost a year ago.

Finally, we wanted to know how the participants related their health to their working conditions; in this regard, the responses were diverse; some participants considered that their health had worsened with work:

I1: Yes. As a result of work, I have cervical and lumbar hernias; I2: My chronic problem is scoliosis and herniated discs, sometimes I have back pain due to the workload and many hours of work.

Others believe that their working conditions have improved after the migration and therefore their health has improved:

I13: Even if there is stress, for me it has improved, because I feel fulfilled when I am working.

While others see no relation:

I21: I do not think I have health problems that I associate with my work, nor that work worsens my health problems.

The COVID-19 pandemic

The COVID-19 pandemic was related in some cases to a worsening of working conditions and health:

I15: I think that what worried me and made me more nervous was the pandemic, because of the virus. I20: Yes, I am certain that after the pandemic, my way of working will be different.

As regards the biological risk due to COVID-19, several topics were highlighted, such as work overload, food health problems and weight gain caused exclusively by COVID-19, strategies to overcome the different health effects, and changes or modifications in the way of working in the future. In relation to work overload, the participants stated:

I1: In the current situation . . . I work more hours than normal to make up for the sick leave of other colleagues who have been infected. I5: Basically, I think I am living just to work.

Health problems related to eating and an increase in weight manifested were as follows:

I3: Anxiety. Before, I could not manage to eat, now I eat too much and I ended up putting on almost 5 kilos. I23: I have gained a few kilos. . . I suffer from anxiety disorder and I started to eat a lot more.

The various strategies expressed by the interviewees to overcome the different health problems caused by COVID-19 were related to the use of drugs or therapies and/or physical exercise:

> *I5: I have a natural drug from Brazil that is fantastic, but I have used it only a few times. I also talk a lot with my mother. I11: My company has an agreement with a platform and we can request 30-minute conversations with psychologists. . .in the beginning, I used it. I14: I have sessions with the psychologist to do therapy, I started going to the psychiatrist for medication dosage, I go to the gym to do pilates and yoga to take care of my body.*

Finally, all the interviewees stated that, in one way or another, the pandemic would change the way they work:

> *I23: People are more careful about hygiene and try to avoid physical contact. I20: In the future, our work will be partly at home and in the office. We even made a best practice guide for the home office 'best practice guide' for the home office.*

These results have been collected in the Figure 1.

Discussion

In our study, the immigrant women interviewed showed work overload, manifesting mainly anxiety and stress. The physical effects related to poor work ergonomics and the lack of occupational health examinations are highlighted. All these health consequences were aggravated by the COVID-19 pandemic.

As highlighted by the systematic review at an international level (Rodríguez-García-de-Cortázar et al. 2021), there is still little research that analyzes the effects of COVID-19 on the immigrant population, although the results found point to an aggravation of their situation of vulnerability that entails a greater risk of infection, labor exploitation and aggravation of the usual problems of immigrant workers, coinciding with the main results of our study.

The COVID-19 pandemic has led to restrictions in physical freedom, loss of professional and social identity, financial worries and anxiety about one's health, exacerbating existing mental and physical health problems and contributing to the emergence of others (Gartner 2020; Kniffin et al. 2021). All these fears have been expressed by the interviewees to a lesser or greater extent in our research.

Work overload was one of the main problems expressed by the interviewees working in the health sector, as well as those working in other, non-health sectors. Staff working in the health sector, mainly nurses and physicians, have had to cope with a heavy work overload in caring for COVID 19 patients and the lack of material and personal resources (Mahdavi and Kelishadi 2020).

In another area which has been less widely researched, part of the services and human resources sector has also experienced work overload, derived from the emerging changes in work practices. Many companies have managed to maintain production by changing to virtual or online working environments, and in these companies, over 80 percent of the employees worked from home during the pandemic, while 41 percent are expected to continue teleworking after the pandemic (Gartner 2020). This has been the situation with most of the women interviewed who worked in the services sector. This fact, according to different studies, has presented numerous challenges, such as not having enough space at home to telework, the site not being suitable, not having sufficient resources or difficulties in striking a work-life balance, all of which have decreased the workers' psychological well-being. This has been observed in women who have worked at home during the pandemic, and in our research, they expressed stress, anxiety and work overload, among others, derived from the organizational factors of the new working practices, which also interfere in family dynamics, coinciding with the studies of (European public Health Association (EUPHA), 2020; Liem et al. 2020; Page et al. 2020).

It should be noted that, in our study, most of the companies did not ensure good ergonomics in the workplace, which led to musculoskeletal problems in our interviewees, derived from the unsuitable nature of their physical workstation. This fact has also been highlighted in other international studies, which have concluded that working in a place that is not designed for work can have detrimental effects on physical and mental wellbeing (Liu et al. 2020; Mahdavi and Kelishadi 2020). As for the

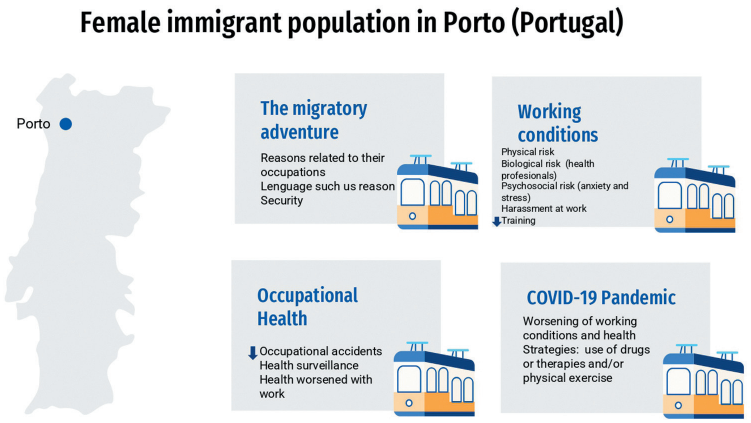

Figure 1. Main topics mentioned by the interviewees.

effects on psychological health, being a woman has been identified as one of the most powerful predictors of the symptoms that characterize anxiety (Liu et al. 2020) Thus, several studies carried out during the pandemic period and in its successive waves show that anxiety disorder is higher in women than in men (Zhang and Ma 2020). This symptom has been manifested verbally by most of the interviewees, while in others, certain behaviors related to anxiety were latent, such as sleep problems, eating disorders or musculoskeletal problems. It should also be noted that two of the interviewees were pregnant, and reported higher levels of anxiety, since pregnancy is a particularly vulnerable time in a woman's life, in agreement with other studies (Zhang and Ma 2020).

As regards eating habits and weight gain during lockdown, our study coincides with research conducted in European countries such as Spain (Sánchez et al. 2020) and Italy (Di Renzo et al. 2020), where the data reported indicate that during the lockdown periods due to COVID-19, there was an increase in the consumption of unhealthy foods and snacks, leading to weight gain (Sánchez et al. 2020). The COVID-19 pandemic has been stressful for most participants, and some of them have sought to release that stress by consuming so-called "comfort foods," which are rich in caloric nutrients and release serotonin, which has a positive effect on mood (López-Moreno et al. 2020). In addition, our study is in line with other research, which states that during lockdown, families had more time to cook but their diet quality apparently did not improve (Ruiz-Roso et al. 2020; World Health Organization [WHO], 2020) which was echoed by some of our participants, who reported a consequent gain in weight.

As for physical exercise, the use of technology to promote physical activity proved to be a promising tool to improve physical fitness at home during the pandemic (Dwyer, Pasini, and De Dominicis et al. 2020). In fact, some of our interviewees hired specialized online sports coaches or used different online platforms and web applications to improve their physical and mental health.

On the other hand, viral infections are characterized by compromised immune function and micronutrient deficiencies, and an adequate dietary intake and supplementation of these functional foods contributes to maintaining optimal levels. In our study, some of the women reported taking supplements, particularly vitamins such as A, B6, B12, C, D, E, folate and trace elements, including zinc, iron, selenium, magnesium and copper, in order to improve their diet and supplement it with vitamin complexes to improve the system, coinciding with the studies by Calder et al. (2020); Gombart, Pierre, and Maggini (2020); Grant et al. (2020).

We also emphasize that, in this investigation, many of the participants recognized that they had suffered harrassment at work from colleagues and employers, and related this fact to being a Brazilian

immigrant woman. Considering that harassment at work refers to intentional, repeated behavior that lasts over time (Trindade, Schoeninger, and Borges et al. 2022), inmigrant women can be vulnerable to different types of harassment, which can be produced in the workplace, with repercussions at individual, family, institutional and community levels. These behaviors can be carried out by close colleagues or even by employers, as is the case of our study.

Finally, it is worth noting that our interviewees used online therapists or psychologists to improve their mental state. This fact is in line with other national and international research, which found that this tool has proven to be useful against COVID-19 by eliminating geographical barriers and improving the quality of mental health care (Prisco, Prisco, and Donnarumma 2020; Soklaridis et al. 2020).

This research has a number of limitations. First, the sample size. This was due to the fact that the research was conducted during the second wave of the pandemic originated by COVID-19, which made it difficult to contact the interviewees. Future studies should guarantee a larger sample to ensure greater representativeness. Secondly, most of the women participating had higher education and a medium-high social status, so that some of our findings may not be applicable to Brazilian immigrant women in other regions of Portugal or in other work sectors.

Conclusions

The women in our study have been integrated into the labor market of the host country and have worked and been exposed to the health risks associated with COVID 19.

Those who worked in the health sector in the first wave of the pandemic suffered the same effects as the rest of the national health sector workers: fear of contagion and poor availability of personal protective equipment, together with ergonomic effects produced by teleworking and confinement, such as stress, poor diet, sedentary lifestyle and weight gain.

These women, as they integrate into the labor market of their destination countries, bring with them an important economic and human capital which benefits the host country.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The author(s) reported there is no funding associated with the work featured in this article.

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