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Original Article

Community diagnosis of occupational health problems according to informal sector actors working in the city of Ouagadougou, Burkina Faso

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ABSTRACT

Introduction: Occupational health promotes physical, mental and social well-being of all workers in their jobs. In Burkina Faso, however, it hardly covers the informal sector. The study aimed to analyze the occupational health problems perceived by informal sector workers in the city of Ouagadougou in 2024.

Methods: We conducted an exploratory qualitative cross-sectional study through semi-structured individual interviews using an interview guide. It included workers of informal sector coming from trade, services and industrial domains and managers of structures working with them. A thematic analysis was carried out using NVIVO 14 software.

Results: Unhealthy working conditions, occupational hazards and inaccessibility to occupational health services were the problems cited by workers. Deficiency of knowledge on these risks, regulatory obligations and the use of personal protective equipment were cited as causes of occupational hazards. The causes of occupational health services inaccessibility were lack of information on these services, the lack of organization of the sector and the focus on the formal sector. The solutions proposed were legal, medical and technical.

Conclusion: Informal workers are confronted to a range of health problems. Their needs should be highlighted in the country's occupational health and social protection policies and strategies.

Keywords: Burkina Faso, informal sector, occupational health

Introduction

Occupational health is a multi-disciplinary and essentially preventive domain of health sciences which is in charge of social, mental and physical well-being of workers.[1] It is recognized as a right of every worker and contributes to decent work.[2] According to International Labor Organization's statistics, in 2019, more than 395 million workers worldwide had a non-fatal occupational injury and 2,93 million work-related deaths were recorded.[3] Occupational health is therefore a major global concern, especially as almost 70% of

workers don't access to social protection in case of occupational disease or injury.[4]

Informal sector is made up of loosely-organized, small-scale enterprises that create jobs and income through the production of products or services.[5] Employment links, when existing, are essentially based on occasional employment, kinship or personal and social connections, instead of formal contracts.[5,6] This sector represents two billion workers aged 15 and over worldwide.[7] It is not easily regulated by governments, including in occupational health safety.[8]

In Burkina Faso, in 2022, statistics showed 1803 occupational hazards, including 1787 occupational injuries et 16 occupational diseases.[9,10] At the same time, less than 3% of the country's workers were registered with the social security system.[11] Although characterized by a lack of statistics on occupational hazards, this informal sector of the national economy seems particularly confronted with precarious working conditions, and sometimes does not considered occupational health and safety as a priority.[10] The consequences of this include insufficient occupational risk prevention measures within the sector's activities. In addition, poor working conditions and low social protection in the informal sector increase the incidence of occupational diseases, leading to a drop in productivity that impacts both the worker and the company.[12]

Significant efforts are made in this domain at political and operational levels. This includes ratification of international conventions, adoption of laws and creation of structures to govern and regulate the field. However, in the informal sector which represents 70% of all jobs in the country, practical difficulties remain in terms of implementing and monitoring these texts.[10] In this situation, the study of occupational health issue in the informal sector and the taking account of the needs of this sector is of major interest in Burkina Faso. The present study therefore aims to analyze the occupational health problems perceived by the informal sector workers in the city of Ouagadougou in 2024.

Methods

It was a qualitative exploratory cross-sectional study conducted in the city of Ouagadougou from December 2023 to September 2024. It involved workers from informal sector and stakeholders coming from structures working with them found relevant to the study theme. Informal sector workers were those working in an informal enterprise without a tax registration number and/or a trade register number and/or a declaration or voluntary insurance with the national social security fund. They came from the three informal sectors defined in 2018 by the National Institute of Statistics and Demography (trade, industry and services). In practice, the concerned were retail and wholesale for the trade sector, and hairdressing, beauticians, tailoring, catering and mechanics for the services sector. The industrial sector was represented by the building and public works industry with painting and masonry trades. The managers included in the study came from state and two association structures. The state structures were the occupational health and safety directorate, the occupational medical inspectorate, the national fire brigade, the regional directorate of the workers' health office and an occupational health service of the said Directorate, present at the Ouagadougou central market.

The inclusion criteria for workers were to work in the city of Ouagadougou's informal sector, be a member of informal trade organization and not work simultaneously in the both sectors (formal and informal) and agree to participate in the study. The sample size for each of the professions included in the study followed the principle of saturation. This meant that data collection was closed when exchanges with participants no longer provided any significant new information. Using an interview guide, semi-structured individual interviews were therefore conducted with the different participants from April to July 2024. A total of 51 stakeholders, including 44

workers, were interviewed in their preferred language by the principal investigator, and recorded for those who consented. The audio data collected was then translated into French for those in local languages, and fully transcribed. They were then encoded and analyzed according to themes using NVIVO 14 software. The Encoding frequency corresponded to the number of mentions of the problem in all the interviews. The consent of each participant was obtained before the interview.

Results

The study population comprised 44 workers and 7 structural representatives. The workers were drawn from nine informal occupations, and included an equal number of men and women. The average age of the workers was 36.07 years, with extremes of 16 and 67 years.

The analysis identified deleterious working conditions, occupational hazards (occupational injury and disease) and inaccessibility to occupational health services (OHS) as problems perceived by workers in the informal sector (Table 1).

Table 1: Occupational health problems mentioned by frequency of encoding

Problems	Encoding frequency*
Deleterious working conditions	**327 (45, 54%)**
Exposure to biological hazards	
Exposure to chemical hazards	
Exposure to physical hazards	
Exposure to ergonomic hazards	
Exposure to psychosocial hazards	
Occupational hazards	**304 (42, 34%)**
Occupational injury	
Occupational disease	
Inaccessibility to occupational health services (OHS)	**87 (12, 12%)**
Inaccessibility to workers' health office	
No coverage of occupational hazards	

Note: * Encoding frequency: Number of mentions of the problem in all interviews

Table 2: Comments on occupational health problems mentioned by participants

Problems	Comments
Deleterious working conditions	"In terms of paint, there are several qualities, there are qualities where the chemicals are strong or when you rub the coating it releases dust often when you vacuum it remains at nostril level and when you spit you see it there." Painter 3
Occupational hazards	"Catering causes accidents, but I've only been a victim once. My hand was badly burned by hot water." Cook 3 "He does his work informally, (...) a guy got burned on a pole, an electric pole here like this." Head doctor of an occupational health service
Inaccessibility of OHS	"It's the fact that mechanics don't benefit occupational health services." Mechanic 5 "They don't set up occupational health services, nor do they join the workers' health office so that workers can benefit from medical check-ups, workplace surveillance, issues of awareness and education for behavioral change. All these aspects are not taken into account in the informal sector. Manager of the occupational medical inspectorate

The problems identified as priorities by all participants were occupational hazards and inaccessibility to occupational health services. The causes of these priority problems are summarized in table 3. The solutions proposed by participants were medical, technical and legal (table 5)

Table 3: Frequency of encoding evoked causes based on priority problems

Causes	Encoding frequency*
Occupational hazards	**301 (49, 67%)**
Insufficient knowledge of occupational hazards and legal requirements No use of personal protective equipment	
Inaccessibility to occupational health services Lack of information Lack of organization in the sector Emphasise on formal sector	**219 (36, 14%)**

* Encoding frequency: Number of mentions of the cause in all interviews

Table 4: Comments of occupational health priority problems causes mentioned by participants

Causes	Comments
Occupational hazards	"It's like I told you; we don't know what we're doing. As soon as we see the money, we ruch in." Hairdresser 1 "It's difficult for the inspectorate to know that there's a company out that must be check, whereas it's through the labor inspectorate's control that we can obliged employers to apply the laws". Manager of the occupational medical inspectorate
Inaccessibility to OHS	"It's a good thing, but I didn't even know it existed. Retailer 5

Table 5: Solutions to priority problems by number of encoding references

Solutions suggested	Encoding frequency*
Technical Knowledge enhancement Appropriate communication	**173 (51, 18%)**
Legal Formalization Occupational hazard compensation Comfortable and adapted individual protective equipment Coercive measures	**103 (30, 47%)**
Medical Accessibility to workers' health office Occupational hazards management Regular medical checkups	**57 (16, 86%)**

Note: * Encoding frequency: Number of mentions of the solution in all interviews

Discussion

The study permitted to gather the perceptions of informal sector workers on the occupational problems they face. Deleterious working conditions, occupational hazards and inaccessibility of occupational health services were the problems mentioned. Occupational hazards and inaccessibility of OHS were the problems unanimously identified as priorities. Lack of use of personal protective equipment (PPE), insufficient knowledge of occupational hazards and legal requirements were the causes cited for occupational hazards. The reasons given by participants for OHS inaccessibility included a lack of information on these services, a lack of organization in the sector, and a focus on the formal sector to the detriment of the informal. The solutions proposed by participants to resolve the priority problems were legal, medical and technical.

Our study found that working conditions were a health problem for workers in the informal sector. This could be explained by the fact that, although these workers are often aware that their working conditions are deleterious, many of them do not always have sufficient financial resources to make the necessary improvements.[10,13] Furthermore, even among those who do have the financial capacity, some refuse to do so due to the lack of real sanctions, despite legal requirements in our context or because of a lack of culture of prevention. Still others choose the informal sector to avoid tax constraints or because of their low education level, but as mentioned earlier, a large proportion of workers do so because of their insufficient resources. [6,14] They haven't access to conventional credit structures and rely on their own savings, their families or tontines to set up their businesses.[10,15] These funds are often insufficient and the profits minimal. The priority remains meeting daily sustenance.[10] Rossier and al also found in 2021 in Burkina Faso that incomes in small-scale informal sector activities were low and insufficient, and working conditions often precarious.[13] State initiatives to finance the informal sector therefore need to be stepped up.

Occupational hazards were also a health problem in the informal sector. This could be explained by the fear they inspire in workers, due to their frequency and their health and economic consequences.[16,17] In Burkina Faso's informal sector, the majority of workers are self-employed.[10] They live from day to day, with irregular incomes that fluctuate with the clientele. In this context, occupational injuries and diseases represent an immediate loss of income for the worker and his family, due to the resulting days not worked.[18] They can also cause a loss of financial autonomy for workers and their families in case of after-effects or death. This is exacerbated by the cost of medical treatment for workers who often do not benefit from social protection.[6,14,18] These workers should therefore be able to benefit from this protection, including compensation for occupational risks.

Inaccessibility to OHS was the last problem mentioned. This could be explained by the fact that these services are not really present in the informal sector, leading workers to feel abandoned.[10,18] Indeed, they feel that the formal sector is the one that benefits from all the privileges provided by the state, particularly in terms of occupational risk prevention and compensation.[19] At national level, the OHS called OST provides the vast majority of occupational health services, but has few interventions in the informal sector. Afolabi also noted a lack of occupational health facilities in Nigeria, and Traub-Merz and al, in a survey of six African countries, found that improving access to healthcare was the public service most in demand in the informal sector.[16,18] Prevention and control structures should include the informal sector in their priorities, especially as it employs a large number of the country's workers.

Insufficient use of PPE has been cited as a cause of occupational hazards. This could be explained by the fact that many workers don't have this

equipment. Some others wear them when they are forced by their employer, or if they consider that there is risk in the work situation, although their knowledge of such risky situations is insufficient.[20] In Uganda, a study found that the reasons why PPE was not worn were that it was not available and that it was not useful.[21] Improving their knowledge of occupational hazards and the benefits of PPE could therefore increase their use.[22] Another factor is the lack of knowledge and compliance with legal occupational health requirements.[15] In fact, Burkina Faso has ratified International labor organization (ILO) conventions and recommendations and passed legislation to ensure workers' health and safety.[23] In the informal sector, however, companies are often set up outside any regulatory framework, and few workers are therefore aware of occupational health laws. What's more, the control structures that should be raising awareness and forcing companies to comply have few human and financial resources, despite the vast and diverse nature of this sector.[8] The capacity of these structures to ensure compliance with occupational health legislation therefore needs to be improved.[22]

The causes of inaccessibility to occupational health services were dominated in our study by lack of information. Few actors in the informal sector are aware of the existence of occupational health structures. This may be due to the fact that informal businesses are created every day without fulfilling the regulatory requirements and often no fixed address in the sector, making them invisible.[15,16] Moreover, when they are informed and have no idea of the legal constraints in terms of occupational health, many feel that it is the role of workers' health office to contact them. However, the informal sector is vast, present in every neighborhood and poorly organized, with workers and structures that are not all part of the national informal organization, complicating this approach. Prevention and control structures would benefit from working through informal sector associations, which have a better knowledge of this sector, in order to achieve greater impact in their actions. Another reason may be the fact that OHS and control structures often pay little attention to the informal sector, which they consider to be poorly organized and vast, in a context where their human and material resources are already limited.[16] They therefore feel no need to adapt their strategies to the particularities of this sector. And yet, in the informal sector, these are often businesses with small staff who cannot afford to take long hours off for medical check-ups like workers in the formal sector.[24,25] Afolabi also noted in Nigeria in 2019 that the activities of occupational health professionals were fragmented and focused on the formal sector, neglecting informal entrepreneurs.[16] It is necessary for OHS to change their view of the informal sector and focus on these structures in order to motivate them to adhere.

The solutions proposed for the two priority occupational health problems in our study were legal, medical and technical. In legal terms, the focus was put on formalizing the sector.[6,18,19] This should help to improve working conditions and reduce occupational risks, as it implies the implementation of legal occupational health obligations.[6] Formalization should also encourage better supervision by control structures and obliged companies to comply with legislation.[8,15] In 2019, the ILO stated that improving safety, health and working conditions in this sector requires a strategy of transition to formal employment for informal workers.[17] However, this formalization should be mixed with an improvement in resources. Indeed, in Burkina Faso, all employers in the public, formal private and informal sectors are legally obliged to provide occupational health coverage for their workers through occupational health services. However, difficulties remain in its implementation. These are linked, among others things, to a lack of knowledge or interest on the part of beneficiaries and insufficient human, material end financial resources for effective monitoring. The occupational medical

inspectorate responsible for this monitoring and the occupational health services seem to focus more on the structured private sector and still struggle to cover the vast informal and public sectors, with few enforcement measures when violations are identified in the informal sector.

In medical terms, regular medical check-ups of workers have been proposed, and should enable early detection and treatment of occupational diseases. To achieve this, the accessibility of the worker's health office needs to be improved. Many informal sector workers have unstable jobs that ensure their day-to-day survival, preventing them from taking long hours off work.[8,24,25] The health and social promotion centers that exist in all neighborhoods could bring occupational health closer to these workers by constituting front-line structures in the domain.[16]

Improving knowledge is a collective technical solution that has been mentioned. It includes raising awareness and training the workers.[22,26,27] It is the first step to empower workers in occupational hazards prevention. Magoha found in his study that workers with higher knowledge of occupational hazards and safety measures were significantly more likely to have more positive attitudes about safety practices, and were less likely to be victims of occupational injuries.[22]

Conclusion

The aim of this study was to analyze the occupational health problems perceived by informal sector workers in the city of Ouagadougou in 2024. The results show that workers in this sector are faced with deleterious working conditions, occupational hazards and a lack of access to OHS. The priority problems in the sector, however, were occupational hazards and inaccessibility to occupational health services. There were many reasons for this, including insufficient knowledge of occupational hazards and OHS, lack of use of PPE, ignorance of and non-respect of legal requirements, lack of organization in the sector, and a focus on the formal sector. The solutions proposed were legal, medical and technical, and highlighted the need for prevention and compensation for occupational hazards in this sector. The results of this study could serve as a starting point for taking better account of informal sector players in occupational health and social protection policies.

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