



Labor, safety and health conditions in informal workers in Bogotá: the case of street vendors

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ABSTRACT

The development of nations is based on the work carried out by individuals. The concern is that the benefit is represented in the economic and social development. Above all, the processes, materials, and conditions for the production of goods or services in which individuals must be considered. These can to some extent generate risks to human health and the environment, which can be aggravated if the majority lack social protection, rights at work and decent working conditions. The results of a study that sought to recognize the labor and safety conditions at work of informal merchants in the city of Bogotá are presented, an important issue, if they are considered, they are people who, in their effort to provide better well-being to their Due to the low opportunities that developing countries experience, families are forced into informality, lacking social protection, and working conditions. It is a mixed descriptive and correlational study made to informal merchants in the city of Bogotá: 58% women and 42% men, between 20 and 65 years of age. An approach was made with 96 informants through a form developed from the Colombian Technical Guide -GTC 45-. The results allowed us to know the high exposure to different factors that generate occupational diseases, as well as the low self-care culture of those who carry out activities informally on the streets of Bogotá.

Keywords: *Occupational risks, informal trade, occupational health, occupational diseases*

INTRODUCTION

In the world, the observation of workers in terms of 'Safety and Health at Work' (or Occupational Health and Safety, OHS, in the UK) is permanent. Since the interaction between the means of production and the labour factor specifies the problems and possible mitigations based on the worker's benefit. This is one of several indicators used to assess people's fundamental rights [1].

This context has come to light after a decade of the Resolution of the European Parliament, in which the circumstances of the current working reality are considered, and the attention is on the mental health caused by the post-pandemic digital work context [2]. From a historical perspective, the human being in his relationship with work has been facing survival situations not only in the face of a fair and sufficient remuneration [3]

but also in his working conditions regarding health and safety at work and in emotional and physical aspects of the development of human capital. On their part and supporting the previous paragraph, [4] (p.87) researchers state that the processes related to intervention in SST have "undergone transformations and changes throughout the historical development of humanity and are expressed in three fundamental trends: industrial safety, occupational health, and risk prevention, the latter considered a broader conception of intervention".

It is glimpsed that, with the passage of time, at the international level, work has been done on policies based on OSH. This is the case in the ILO Guide on International Standards [5] where, among others, they show concern regarding the most vulnerable workers in high-risk sectors, such as young people and middle-aged adults in the informal economy. Likewise, the World Health Organisation (WHO) [6] affirms that the OSH is a multidisciplinary activity that is based on the establishment of the process articulated by the planning, organisation, direction, and control for the protection and promotion of actions that mitigate and prevent diseases, as well as factors and conditions that endanger OSH.

In Colombia, the public policy on OSH, through Decree 1072 [7], has become the object of study since one of its objectives is to identify hazards and assess risks in OSH to prioritise them and establish the necessary controls. For this reason, this regulation exposes the need for each of the administrative officials and contractors to participate in the identification of hazards in the work environment. Likewise, the country has assumed the challenge, complying with what was agreed upon by the Andean Community regarding "fundamental regulations on safety and health at work", to develop the best practises to improve the quality of life in society in general. Therefore, the issuance of technical regulatory standards aimed at guaranteeing the safety of workers in the prevention of work accidents and occupational diseases is understood as a necessity.

There are some concerns in the guidelines regarding the pursuit of well-being and optimal health conditions for workers to guarantee an

income that allows them to contribute to their level and quality of life [8]. Nevertheless, the concern is not strongly evidenced by those workers who do so informally. Half of the working population in the world performs non-formal work [9] in inadequate conditions, poorly paid, with long and exhausting hours, in precarious working conditions that affect living and health conditions [10]. They do not have social protection, nor do they use security measures in the workplace. This results in informal workers being exposed to risks such as pollution, vehicle noise, lifting heavy loads, inadequate postures, repetitive work, and inadequate organisation of work [11].

LITERATURE REVIEW

Occupational health is a topic that is linked to productivity and health in the labour context at a national and international level. An example of this can be seen in the study carried out in Latin America and the Caribbean [8] to find out the causes and consequences of informal employment. This study affirms that the informal sector would not be an object of concern if it were not for the lack of social protection, such as health insurance or retirement, and the low productivity shown by its members. This makes informal workers vulnerable, as they are generally more susceptible physically and economically. In another investigation carried out in Mexico City [13] with 155 workers, including street vendors and street acrobats, they found that the most frequent risks and damage to health are musculoskeletal, respiratory, ear, and eye damage associated with exposure to conditions and occupational risks, accidents, assaults, and sexual harassment by drivers.

In Colombia, research on the occupational health and safety conditions of street vendors in the municipality of Sabaneta [14] accounts for the unfavourable circumstances and their vulnerability to different risks. This is a mixed approach study of descriptive scope in which a survey was applied to 50 street vendors. The results show that 46% are women, and of them, 84% just finished high school, 76% do not have their own home, and only 64% know about the elements that are needed to guarantee their

personal protection at work and that it is important to be exposed to different factors to learn what may lead to diseases.

Another similar study was conducted in Villavicencio, Colombia. It analysed the sociodemographic characteristics, health perceptions, and occupational risks of the population of informal lottery ticket vendors. The descriptive, cross-sectional study carried out on a non-random sample of 249 informal vendors investigated their sociodemographic and economic characteristics, affiliation to the general health system, income level, responsibility at home, occupational risk factors, and working conditions. The results showed that most lottery ticket sellers are over forty years of age with low pension affiliation and daily exposure to noise, health, and social risks. Even so, the self-perception of health as poor or regular does not exceed 50%. This allowed the researchers to conclude that this is a very vulnerable population [15].

A team from the Universidad Cooperativa de Colombia [16] worked on the social implications of the rights to health and social security of informal workers. The study has a perspective on human rights and Colombian jurisprudence from a qualitative documentary approach. The literature review concluded that there has been a doctrinal evolution since the different sentences handed down by the court in the context of human rights. They promote the minimum guarantees of rights to work and, especially, health. In this same line, a study on the inclusion of informal workers in the centre of Bogotá [17] to social security is carried out. The authors consider the non-compliance with state regulations since these workers used within its statistics that positively support employment and occupation rates. Nevertheless, the state segregates them from the rights to social security, which evidences the lack of protection for this population.

Similar results were presented in the study on the right to health in Colombia. It was recognised that "the process and management given to the right to health have not been uniform." [18] (p. 51) This could be considered a disturbing statement if one considers that health in this

country is no longer a social, economic, and cultural right but an autonomous fundamental right. In the same way, through a non-probabilistic investigation with 74 participants, the 2007 National Survey of the Informal Sector of the Ministry of Social Protection was applied [19]. There, the OSH risks of street vendors in the Cayzedo Square of the City of Santiago de Cali were identified. It was found that noise, high temperatures, and traffic risks—both psychosocial and biomechanical—are the biggest problems to which street vendors are exposed. This investigation also corroborated that the health and work conditions of the people who carry out this economic activity are not adequate, a situation that generates a deterioration in the health and quality of life of street vendors.

Theoretical Framework

Today, the prevention of diseases in workers caused by the development of their functions in their work tasks [20] is a topic that worries people and requires being aware of accident prevention. This prevention should be understood as one of the most important topics as far as OSH is concerned [21]. Thus, it has been practised since legendary cultures and has been evolving to the extent of the dynamics of the production processes themselves. It then became more noticeable since the industrial revolution due to the changes generated in not only economic but also social aspects. The technological transformations have had increasingly rapid and vertiginous changes, which also promote restructuring, such as regularisation in terms of worker safety, based on international institutions such as the International Labour Organisation (ILO) [22], which is the benchmark for Colombia on the subject.

In its invitation to develop public policies to achieve high levels of health for all peoples, the ILO has inspired the subject's approach both to people who are formally linked to productive processes and to those who, due to social and economic conditions, are forced to be in the informal sector. According to the National Department of Statistics (DANE) of Colombia [23], in the July-September report, by August 2022, it was at 58.3%; practically, 6 out of 10

workers work in informal employment. The relationship is even stronger (10-4) in Bogotá, where it affects 36% of the population. Likewise, in a study carried out by the Universidad del Rosario [24], it is reported that only 7.8% of this population is linked to the Social Security System, and that the lack of protection has been increasing over time.

Unemployment in Colombia, especially in the city of Bogotá, is driven by different causes, as stated by DANE [23] in its report. Among them are migration from neighbouring countries and

peasant migration to the city for better opportunities, technological unemployment, etc. This unemployment leads people to carry out work activities outside of adequate conditions in terms of health and safety in their performance. Thus, the basic principles proposed by the ILO [25] such as an optimal environment and organisational climate, contractual guarantees, environmental factors, and appropriate designs of jobs are necessary to guarantee the safety of all people, positively, in health, occupational performance, and activities related to the socio-family environment, which are shown in table 1.

TABLE 1: Basic principles proposed by the WHO to guide the security policies of all peoples.

Beginning
Health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity.
The enjoyment of the highest degree of health that can be achieved is one of the fundamental rights of every human being without distinction of race, religion, political ideology or economic or social condition.
The health of all people is a fundamental condition for achieving peace and security and depends on the broadest cooperation of individuals and States.
The results achieved by each State in the promotion and protection of health are valuable to all.
The inequality of the various countries in relation to the promotion of health and the control of diseases, especially communicable diseases, constitutes a common danger.
The healthy development of the child is of fundamental importance; the ability to live in harmony in a world that is constantly changing is essential for this development.
The extension to all peoples of the benefits of medical, psychological, and related knowledge is essential to achieve the highest degree of health.
Well-informed public opinion and active cooperation on the part of the public are of paramount importance for the improvement of people's health.
Governments have a responsibility for the health of their peoples, which can only be fulfilled by adopting adequate health and social measures.

Note. The table was elaborated based on Dueñas [26].

The table draws attention to the task of security policies at work, especially for those who, regardless of whether it is through formal or informal work perform a function that in many cases generates economic income just to survive [27]. Therefore, OSH management should not be an option; on the contrary, it should seek to permanently guarantee the mental and physical well-being, regardless of the area or economic activity they participate. Therefore, the concern

for the prevention of diseases caused by working conditions and the protection and promotion of workers' health [7] must be permanent regardless of who, where, and under what circumstances the function is performed. In addition, it must consider risk factors related to ergonomics, physical, psychological, and biological, and what characterises these like postures, noises, isolation, viruses, etc. [28].

TABLE 2: Data on risk factors.

ergonomic	Physical agents	psychological	biological agents
bad postures	Noise	Isolation	Virus
Long periods of time standing	vibrations	job insecurity	bacteria
Fast pace of work	Extreme temperatures	Workplace Harassment	Fungus
Repetitive work	inadequate lighting	sexual harassment	
insufficient breaks			

Note. The table shows a collection of information from sources such as the Ministry of Health and Social Security of Colombia.

In Bogotá, 2020, there were 39,620 workers dedicated to informal sales which 51% were women. They had different levels of training who carried out trade with various products: from sweets, cigarettes to retail, even clothing and some small appliances, among others, depending on the opportunity and public spaces allowed [29]. It is reported that the income obtained monthly sometimes exceeds the current legal minimum wage. However, the risks to which they are exposed are worrisome precisely because of the places and environments where they carry out their activities. In this sense, regardless of the activity and setting, workers are exposed to environments with inadequate ergonomic conditions, exposure to physical agents, psychological risks, and biological agents, so it is necessary to evaluate and improve them permanently [30].

Occupational safety implies determining the situations and elements that include both ignorance of risk information and ignorance of the risks themselves. This contributes to committing employees and employers in matters related to safety and health. Occupational safety has revealed important elements that must be understood, such as: attitudes, beliefs, and behaviour [31]. Workers have the right to know and be intervened to promote all the elements that make up a safe work environment [32]. The authorities in the subject of occupational health must determine the different elements, aspects, and contexts in which the workers are involved. In addition, they should supply the respective policies considering the entirety of these aspects [33].

In this way, the general objective is to allow the working population of a company to have a simplified prevention systems containing clear guidelines and permanent supervision over their workplace. Occupational safety is articulated with the concerns of both parties: worker and company [34]. The culture of prevention requires the commitment of employers, workers, and the State [35] towards health and safety. Additionally, reflection on the correct actions and measures that can be taken on health and safety of workers, through values, perceptions, knowledge and direct or indirect participation [36], regarding the risks to which they are individually or collectively exposed at work.

The companies have occupational health programs as coadjutant allies. This helps to establish the intentions for the permanent improvement of the working conditions of the staff members. Nowadays, this fact is an important factor that demands the formation of the occupational health joint committee. They would formulate, manage, and train others on the best use of the resources of protection. Likewise, surveillance is needed so that the company and the worker jointly comply with the prevention, hygiene, and safety measures at work [37]. Thus, both the company and the employees adapt to public policies regarding the provision of guidelines to ensure the supply, use, maintenance, replacement, and final disposal of personal protection elements exposed to risk factors during the development of their functions [38].

The reality of the occupational disease is far from the imaginary of the physical deterioration of a worker due to his permanent work activity. In

fact, it is more a consequence of specific circumstances beyond his control. Therefore, in its prevention, it is intended to protect the worker from the exposures that his job brings, identifying the true origins [39] with preventive actions based on the evaluation of elements that are around the processes and jobs, work conditions and characteristics of the places where the action is carried out [40]. Risks at work and preventive actions have generated policies to be considered by those who are responsible for developing production processes regardless of their size. Nevertheless, persuasion is needed to be accepted by employers, as well as by employees [41].

Even though, the organizational management of OSH is associated with costs such as the incidence of accidents and occupational diseases [42], it is also associated with benefits that result from the better levels of productivity as an effect of commitment from the collaborators to the for their well-being, protection, and job security. In this context, approaches are given for the study of risks at work that contemplate elements that are present in the specific production processes, as well as the one that evaluates other spheres in the workspaces. Thus, the first considers a medical perspective while the latter the legal part [43]. In other words, taking care of managing Occupational Health and Safety is a key factor for the optimal functioning of any organization.

Work is being done to assess the reality in which people who carry out activities within informal commerce. The exposure of these individual is greater to those who work in companies through labour contracts. The results presented here are part of the diagnosis in terms of Safety and Health at Work, as well as the expectations for a group of Colombians whose job opportunities with legal guarantees are scarce.

MATERIALS AND METHODS

This is a quantitative study of a descriptive and correlational type. From the quantitative point of view, the information was systematized based on the data obtained through the applied instrument. It was considered necessary to compare the numerical variables obtained based on observing the level of risk of the population to an overlapped characterization of the general population that works in activities in similar circumstances [44]. As for the descriptive analysis, the data is collected with generalizations made to people with similar characteristics. The researchers do not qualify the attitudes or behaviours of the population under study, they only report the information collected in an objective manner trying to understand their practices within their work environment [45]. Likewise, the data obtained from the informants their lives' stories is verified in function of mitigating distortions without influencing in the answers [46] which is typical of descriptive type studies.

To estimate the conditions to which the population under study is exposed, in mid-2022 an instrument was applied based on the guide for the identification of hazards and the assessment of occupational health and safety risks -GTC 45. -. The instrument has 34 items, with a Likert-type formulation, with five response options. These are organized into three groups: characterization of the observed population, exposure to safety and health factors at work, and self-care culture; the instrument is found in appendix A. After the application of the instrument, the reliability and internal consistency test was carried out, which yielded a Cronbach's Alpha above 0.8 as shown in the following table [47]. The coefficient is considered good and reliable due to its high internal consistency.

TABLE 3: Instrument reliability statistics.

Cronbach's Alpha	Cronbach's alpha based on standardized items	No. of elements
0.801	0.803	34

Note. Own elaboration (2023), based on statistics provided by the SPSS

In the estimation of the conditions to which the population under study is exposed, the OSH - GTC 45- guide for the identification of hazards and the assessment of risks [49] was applied to gather more precise knowledge of the exposures of itinerant workers. Thus, three groups are formed through the questions: characterization of the observed population, exposure to safety and health factors at work, and self-care culture.

After the application of the instrument, the systematization was proceeded with the help of the statistical package SPSS and Excel. Then its validity was tested through Cronbach's Alpha, followed by the analysis and description of the variables created. Once the information was systematized and listed, the results were described. Finally, the exposure and self-care of street vendors was measured using the minimum and maximum method from the statistical package worked on low, medium or high levels.

A sample was worked for convenience since the informants were approached at different times in training meetings that the Institute for the Social Economy -IPES- program. They attend the program freely which resulted in a personal and systematic approach in the different areas in their workspaces by those who collected the information. The population was 96 people: 58% and 42%, women and men respectively. They were between the ages of 20 and 60, union members and part of the IPES database. They carried out traveling commercial activities,

typical of their informality in the downtown and Chapinero in Bogota, Colombia.

Even though the object of the research is the conditions under which informal workers develop their work, the researchers previously disclosed the objective of the request for such information, as observed in Appendix A. Likewise, the instrument is a projection of other questionnaires used for the knowledge of risks to health in work environments, such as the "Guide for the identification of hazards and the assessment of OHS risks—NTC 45" [48]. This guide was commissioned for this study to simply identify, without any manipulation, such risks in the daily work of the designated personnel. In this way, the ethical criteria are based on what is reasoned in its institutional document, "ethics policy, bioethics, and scientific integrity", in relation to the fact that "research is a collective construction that is developed by and for society, which has the right to demand transparency, honesty, and rectitude" [49].

RESULTS

The collected information allows for the establishment of an average of 60 activities in informal commerce. These were grouped into four groups according to their nature: food production and trade, miscellaneous trade, sweets, and clothing sales. Likewise, it was revealed that the participation of women in informal commerce is relevant since it represents 58% of the total sample.

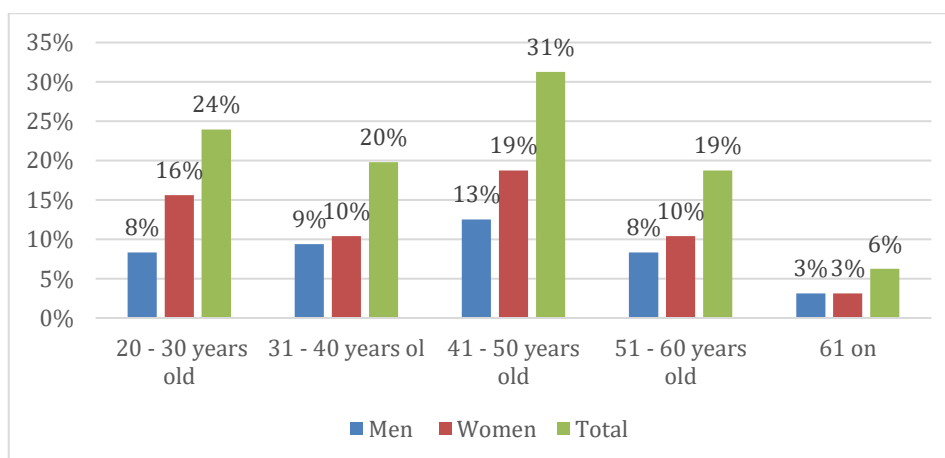


FIGURE 1: Ages and gender of informal traders.

In the same way, informal activities employ 56% of people over the age of 40. Relevant if one considers that job opportunities in formal jobs for men and women who are over the age of 35 are scarce, and most of this population are women (Figure 1).

In terms of social security, Table 3 gives an account of the amount of the population that

contributes to EPS (government sponsored health insurance) and the Pension Fund, as well as those protected by ARL (accident insurance). Of the total number of people who participated in the study, the majority do not contribute to EPS; only 35% do, 8% to the pension fund, and 5% are covered by ARL.

TABLE 3: Social security in informal traders.

Age	Gender	EPS		Pension fund			ARL		
		Yes	No	Yes	No	Does not know	Yes	No	Does not know
20 to 30 years	Man	4	4	0	7	1	1	6	1
	Women	4	11	0	12	3	1	11	3
31 to 40 years	Man	4	5	1	4	4	1	4	4
	Women	3	7	1	7	2	0	7	3
41 to 50 years	Man	3	9	1	5	6	1	5	6
	Women	8	10	3	9	6	1	8	9
51 to 60 years	Man	3	5	2	3	3	0	2	6
	Women	4	6	0	6	4	0	3	7
61 and over	Man	0	3	0	2	1	0	2	1
	Women	1	2	0	1	2	0	1	2
Total %	Male Total %	15%	27%	4%	22%	18%	3%	20%	19%
	Women Total %	21%	38%	4%	36%	16%	2%	31%	25%
	Grand Total %	35%	65%	8%	58%	33%	5%	51%	44%

Note. Own elaboration based on the results of the instrument.

The outlook for women is disadvantageous in all cases, since when comparing the data to men, they are the ones with the least confidence.

TABLE 4: Age and informal activity.

Activity / Age	20 to 30 years	31 to 40 years	41 to 50 years	51 to 60 years	over 61 years
Food	11%	10%	17%	7%	3%
misc.	7%	6%	11%	10%	2%
Confectionery	3%	0%	3%	0%	1%
Clothes	2%	3%	0%	1%	0%
Total	24%	20%	31%	19%	6%

Note. Own elaboration based on the results of the instrument.

Table 4 reveals that 49% of people sell food, 38% sell miscellaneous items; the rest sell sweets and clothing, which correspond to 7% and 6%, respectively. Likewise, the sale of food products concentrates 27% of the population over 40. On the other hand, it is found that 64% carry out their activities at night, 25% during the day, and 11%

mix. Regarding the number of days, they work per month, 58% work between 23 and 30; 30% work on average 18 days; and 12% work around ten.

Regarding daily life aspects of informal workers in Bogotá and monitored through the instrument

applied and obtained in the Colombian Technical Guide -GTC-45-[49], especially in aspects that are shown in Figure 2, findings that account for

the status of informal workers in terms of safety and health at work.

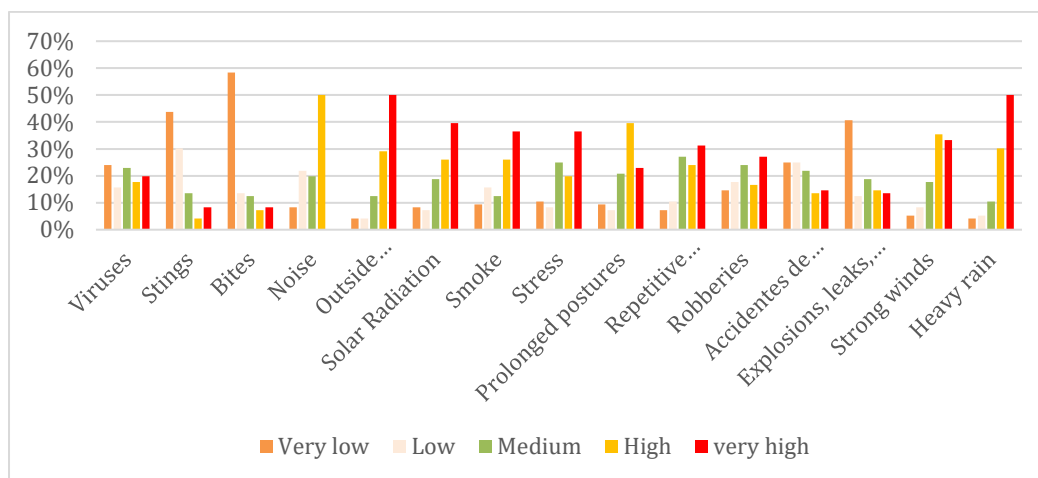


FIGURE 2: Factors and level of exposure of informal workers in their daily activity.

Regarding the frequency of factors to which informal workers in Bogota are exposed, from the 15 factors analysed, all workers reported having them on some level. However, it is noteworthy that the most reported exposures are those related to the weather, such as heavy rains at 80%, extreme cold or hot temperatures at 79%, strong winds at 69%, solar radiation at 66%, smoke at 63%, and noise at 50%. Furthermore, there are a high number of robberies (44%), as well as traffic accidents (28%). The reason for this is that people work in jobs that are carried out on the street.

legs; neck and back pain; spinal problems; or musculoskeletal injuries. Stress is another prevalent factor reported at 56%.

In relation to other physical and psychological issues, ergonomics also yielded interesting data. Exposure to prolonged inadequate postures is high at 63%. In the same way, 55% tend to make repetitive movements. Thus, workers are prone to have pathologies and negative consequences in relation to discomfort or pain in the shoulders and

In summary, in relation to what was reported in Figure 2, the people who are in informal commerce report being exposed to most of the 15 factors at an alarmingly high level. One of five informants reported high levels for at least 70% of the 15 aspects. Thus, those who are forced to work in the informal sector are at high risk and exposed to unsafe conditions. On the other hand, and as a possible detriment to some, it was found that 34% of workers in informal commerce do not interrupt their workday to take active breaks, bringing them closer and more quickly to the increasing appearance of different occupational diseases associated with occupational factors such as repetitive activities and force. Table 5 presents an overview of the culture of self-care in relation to the commented aspect.

TABLE 5: Active breaks and time dedicated to them.

		Time of each break in minutes					
		0	5 to 10	10 to 15	15 to 20	10 to 25	25 to 30
Times you interrupt to rest from your work	0 times	3.4%	0%	1%	0%	0%	0%
	1 time	0%	3%	7%	0%	7%	2%
	2 times	0%	2%	4%	2%	5%	2%
	3 times	0%	1%	2%	3%	3%	2%

	4 times	0%	4%	6%	0%	0%	0%
	5 times	0%	1%	2%	2%	1%	0%
	6 times	0%	1%	0%	0%	0%	0%

Note. authors based on the results of the instrument.

Thus, a high percentage of informal workers, due to ignorance or concern not to lose possible sales, are prone to some occupational risks of a professional nature, such as physical or mental. Despite knowing about the safety implements necessary in some trades and especially for street vendors, many are not consistent in carrying them (Figure 3). In response to the question of

whether they know that the use of protective implements is important as a resource for their health and safety, some people regularly use them. But even among these participants, there are a significant number who know that it protects them but do not use it. Figure 3 allows us to know the self-regulated security behaviour of the people surveyed.

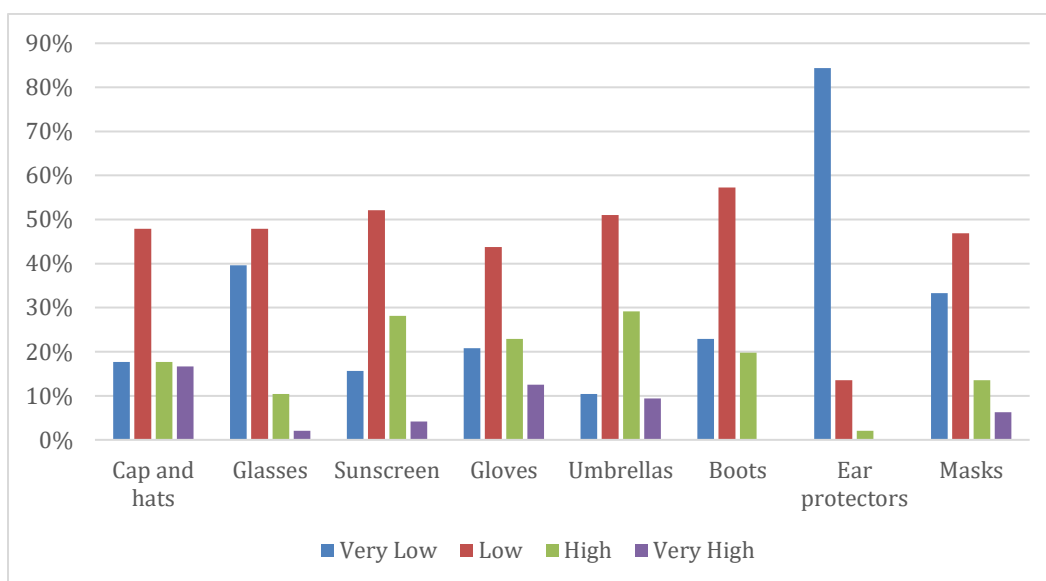


FIGURE 3: Informal workers who use security implements.

In short, the culture surrounding the use of basic elements for health is very worrying. Most are discontinuous in the use of resources that allow them to be safe and minimise OHS risks. According to the assigned weights, those who wear headgear (66% for hats and others), glasses (88%), sunscreen (68%), gloves (65%),

umbrellas (61%), boots (80%), ear plugs (98%), and face masks (80%) are at a higher risk. This being the case, the outlook regarding this aspect is cause for concern considering working days and hours, which rapidly promote occupational diseases.

TABLE 6: Level of exposure and self-care of informal workers

Working day	Exposure Level			Self-care level		
	Low	Medium	High	Low	Medium	High
Diurnal	1%	20%	4%	8%	17%	2%
Nocturnal	5%	4,5%	14%	17%	36%	10%
Day and Night	1%	9%	1%	3%	7%	1%

Note. Authors based on the results of the instrument.

Through the statistical package SPSS and the method of maximums and minimums, it was found that there is a challenge regarding self-care and discipline when it comes to exposure to factors and the use of protective implements that can affect the health of workers in the informal sector. Table 6 shows that the level of exposure is varied; however, the fact that the medium level predominates and is followed by the high level calls the capital's authorities attention to implement action plans that contribute to its mitigation. Self-care levels are similar and more striking for those who work the night shift.

DISCUSSION

Unemployment worldwide is a trigger for informal employment, and Colombia is no different, especially with the migration processes fuelled by the social problems of neighbouring countries. Bogotá faces the phenomenon of informality with more growth, thereby supporting the income and livelihood of families that have few opportunities to access formal employment, resulting in street vendors. Thus, the conditions of labour and health risks in which they live with their work routine make them vulnerable to suffering from some type of illness or work-related accident at a higher rate compared to formal work. Formal workers are constantly monitored by their companies due to the prevention required by the entities that provide OHS services.

The reality of people within informal commerce is a call for the public administration to work on policies that guarantee the mitigation of risks. Women and those over the age of 40, who already have few opportunities to engage with companies, are a significant majority. Likewise, it is an alert for training institutions to carry out campaigns that bring informal workers closer to the handling of basic implements to strengthen their safety at their multiple daily activities, as stated in this diagnosis as far as OHS is concerned.

The target population has not yet been considered highly regarded by local government and society actors [6] within public policies regarding social security prevention. This, accompanied by bad practises in safety, health, and hygiene, as well as

schedules and night shifts, gradually contributes to the expansion of a health, social, and economic problem for the capital's administration. However, as mentioned, it is also necessary for national institutions from different disciplines to address the situation, among other strategies, through the educational and social training of this group of workers based on its mitigation.

Future Directions

Considering the findings of this study, it would be relevant for state agencies, specifically those in Bogotá, to establish educational plans. Informal workers could be more aware of the risks they face while carrying out their activities and some strategies to reduce them, considering the importance of this type of work for their livelihood. The inclusion of the teaching of occupational risk prevention is a need demanded not only by the public administrations of the different countries but also by the whole of society [50].

LIMITATIONS

The most complex limitation of this study is associated with the sample from which the information was obtained. The workers surveyed belong to a particular city in Colombia, and there are no data to compare the findings with those of other cities in the country and establish similarities or differences.

CONCLUSIONS

The relationship of human beings with work has undergone changes and transformations throughout history. These changes have been expressed not only in relation to the remuneration received for a certain activity but also in the safety and security conditions of health offered by each job. Today, public policies have been proposed to protect workers, trying to mitigate and prevent diseases and risk conditions that endanger their integrity. In Colombia, from the standpoint of public policy, attempts have been made to prioritise and establish controls to mitigate the dangers and risks to which workers are exposed. Although these guidelines seek to promote well-being and optimal health

conditions, the characteristics of employment in the country do not ensure the success of what has been proposed. Today, half of the working population works in non-formal jobs with inadequate and precarious conditions that have effects on their living and health conditions. In the specific case of Bogotá, the development of labour activities outside the formal sphere is generated by the confluence of different factors, such as migration from neighbouring countries, peasants who see better opportunities in the city, and unemployment, among others. The practise of informal work activities has the consequence that they are carried out in environments with inadequate ergonomic conditions and are exposed to physical and biological agents, as well as psychological risks, among others.

In this study, it was possible to identify the commercial activities in which a group of informal workers from the city of Bogotá is engaged. They were grouped as follows: food production and trade, miscellaneous trade, sweets, and clothing sales. These activities are preferably carried out in the streets of the city, exposing workers to different risk situations, such as those associated with the weather (heavy rain and extreme temperatures), air pollution, noise pollution, theft, and accidents on the road. According to the findings presented, informal workers in the city are highly susceptible to different risks while carrying out their work. In this sense, the propensity that workers have for diseases associated with prolonged postures and stress is relevant. Another not-minor element is the age of those who are engaged in informal work. The number of workers over forty increases due to difficulties in entering the world of formal work. The same occurs with gender, since there is a greater number of women exercising this type of activity. This situation generates a series of challenges for the state, which must not only seek the well-being of workers through laws that promote their care but also educate the population about the risks that informal work entails. Thus, it could motivate the hiring of men and women who are over forty to discourage informal work and avoid the risks

posed to workers.

Author Contributions

Conceptualization and methodology, ADP and DCS; software, ADP and DCS; investigation, ADP, DCS, KN-V., writing—original draft preparation, ADP, DCS, KN-V; writing—review and editing, ADP, DCS, KN-V; supervision and project administration, ADP All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement

Ethical review and approval were waived for this study due to this study was self-managed by the authors from the informal activity that they live in Bogotá. Likewise, the informants are part of a training process of the Universidad Colegio Mayor de Cundinamarca and IPES, which allowed the application of the instruments.

Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

Data supporting the findings of this study are available upon reasonable request from the corresponding authors.

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Conflicts of Interest

The authors declare no conflict of interest.

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