Potential health risks of waste pickers

Riscos potenciais à saúde de catadores de materiais recicláveis

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Abstract

Waste pickers have an important role in contributing to the growth and development environment. Analyzing their perceptions on issues that relate to health is necessary since their representations determine positive or negative attitudes against their health and quality of life. The study aimed to analyze risk factors related to the health of waste pickers. This is a qualitative study, descriptive and exploratory, conducted in 2013 with 10 pickers, of both genders, in a cooperative in Jequié-BA. Data were generated through semi-structured interviews and analyzed using the technique of Thematic Content Analysis Categorical. Emerged three categories: perception of recyclable material collectors on the disease process, perceptions about work accidents, and health risks related to their activity. Results indicate that collectors perceive health as a necessary tool to get work as a requirement to generate livelihood. In the exercise of the activity there was noted physical risks, chemical, biological, ergonomic, and work accident. The risks were seen as a condition of return for subsistence. Public policies in education and health need to be reviewed and appropriate to the reality of this population, influencing the management of their health care.

Keywords: Collectors. Occupational Risk. Quality of life.

Resumo

Catadores de material reciclável possuem um papel importante, contribuindo com o crescimento e desenvolvimento ambiental. Analisar sua percepção sobre aspectos que se relacionam à saúde é necessário, uma vez que suas representações determinarão atitudes positivas ou negativas diante a sua saúde e qualidade de vida. O estudo teve como objetivo analisar fatores de risco relacionados à saúde dos catadores de materiais recicláveis. Trata-se de um estudo qualitativo, descritivo e exploratório, realizado em 2013 com 10 catadores, de ambos os sexos, em uma cooperativa no município de Jequié-BA. Os dados foram produzidos através da entrevista semiestruturada e analisados a partir da Técnica de Análise de Conteúdo Temática Categorial. Emergiram 3 categorias: percepção dos catadores de material reciclável sobre o processo saúde-doença; percepções sobre acidentes de trabalho; riscos a saúde relacionados à sua atividade. Resultados apontam que catadores percebem a saúde como ferramenta necessária para obter trabalho à medida que a condiciona e gera subsistência. No exercício da atividade verificaram-se riscos físicos, químicos, biológicos, ergonômicos, e, de acidente de trabalho. Os riscos foram encarados como condição de troca pela subsistência. Políticas públicas de educação e saúde precisam ser revistas e adequadas à realidade desta população, influenciando na gestão dos cuidados à sua saúde.

Palavras-chave: Catadores. Risco Ocupacional. Qualidade de Vida.

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INTRODUCTION

The historic achievement of capitalism has strengthened market logic where unbridled production, accompanied by habits of consumption and waste in the population, contribute to the extended and varied waste generation¹. The reality betrays not only environmental degradation, but also the neglect against a portion of the population that seeks the processing of solid waste ensuring their survival, highlighting the collector of recyclable materials.

The Scavenger Recyclable Material is recognized by the Brazilian Classification of Occupations (CBO) under the code 5192-05, being described as a class of workers who "scavenge, select and sell recyclable materials such as paper, cardboard and glass, as well as ferrous and non-ferrous and other materials not reused"². Despite the formal recognition allow class organization in cooperatives and other associations, there are still workers at risk of accidents on the streets and in garbage dumps.

The garbage collectors is for their livelihood, condition to ensure the costing of their spending, their integration in the labor market, while the negative connotation socially constructed around it generates discrimination, prejudice, and the non-recognition by society and the lack of environmental education of most people³.

In July 2010, Congress established the National Policy on Solid Waste (PNRS) as a tool for formalizing the work of scavengers, elimination and recovery from landfills, economic emancipation and social inclusion. The proposal represents a quantum leap for the health of these workers, given their exposure to the risk of accidents in handling material, climatic variations, traffic accidents and often urban violence⁴.

Brazilian law is clear when dealing with risks related to work in Regulatory Standard n. 09 (NR-09) which provides for the Prevention Program Environmental Risks. This standard considers environmental risks "existing physical, chemical and biological agents in the workplace which, due to their nature, concentration or intensity and exposure time, are capable of causing damage to workers health"⁵. The lack of planning and management of waste disposal has been worsening health conditions and increasing the risk of disease. Improper disposal of household and uncompromising residue has subjected the workers handling the waste in an attempt to select it.

Studies on waste pickers have been highlighted in Brazil, where we observe an increase in the number of people who fit into this activity¹. Despite the advances made, yet it is evident the neglecting of bodies across the public health policies for this population. Examine perceptions of these professionals regarding the aspects surrounding their health-disease process is necessary because it is from their beliefs and representations that these workers will have positive or negative attitudes towards their health and quality of life elements, and contribute to the planning, monitoring and evaluation practices of interventions aimed at this population.

Based on the assumptions described previously, this study aimed to analyze the risk factors related to the health of recyclable materials in a Bahian city.

METHOD

These are qualitative study, descriptive and exploratory⁶. The survey was conducted during the months from February to June 2013. The empirical field research was a shed belonging to a worker cooperative in Jequié, located in the southwest of the state of Bahia, Brazil.

The research subjects were determined from re-check the data in the interviews, from the moment in which the results of more cohesive and consistent formats demonstrated repetitive and redundant information⁷. Obeying these saturation criteria, participated in the semistructured interview 10 pickers of recyclable materials, of both genders, aged between 22 and 48 years.

The interviews were conducted individually in a courtesy room toward the cooperative, workers and students were invited to attend the interview at the interval time of their productions. The interviews were recorded and transcribed, *ipsis litteris*, as they were expressed by informants. The results were organized and analyzed according to the technique of Content Analysis⁸ and obeying the steps: phase 1: Pre-analysis; phase 2: material exploration; and 3rd phase: data processing, interpretation and inference. After transcribing the interviews, data were presented in categories, which were discussed taking as a principle of interpretation of the analysis units that emerged from thematic analysis of the answers of the interviewees. At the end of each indentation performed in the speeches of social subjects is indicated in parentheses alphanumeric element, which corresponds from T1 to T10.

The study complied with Resolution 466/12 of the National Health Council⁹, obtaining advice of approval by the State University of Southwest Bahia Research Ethics Committee under Protocol n^o 9755, CAAE 00828912.9.0000.0055, being offered to informants before participation in the production of data, the Consent Free and Informed (TCLE).

RESULTS

Among the respondents, 2 were below 30 years old and had less than 1 child. As for education, 1 respondent had not completed high school, 1 was illiterate and the other had incomplete primary education. No respondent has more than 1 minimum wage, only 4 informants were female.

After examining the communication of respondents, the content of the statements was explored within the context discussed, in which we highlighted the following categories: perception of scavengers about the health-disease process; health risks related to the collector of recyclable material activity; and perceptions of waste pickers about workplace accidents.

Perception of scavengers about the healthdisease process

The association between work and health was checked when asked about its concept of health, where respondents have multiple perceptions about this object. As the clippings shown below, we found support for category *Perception of scavengers about the health-disease process*, which was composed of 10 units sense. "Without health no working" (T2).

"Health is everything, without it there is no way to work" (T3).

"Health is a person is healthy, endure work, for me it is to be healthy" (T6).

By representing their livelihood and their integration in the labor market, the collectors do not seem concerned about the damage to health caused by work since they are supplanted by the fact that activity to ensure minimum living conditions and promote their social and professional integration (MIURA, 2004). In prepared testimony, it can be seen that reality:

"I take that money here; he's the one I keep my family" (T1).

"I think any job that mess with recycling, is not beneficial to health" (T4).

"It is an opportunity not to be stopped, not having a job, not the person is without work" (T5).

For some situations are faced as a consequence of their work, and are regarded as a condition of return for subsistence, so that often the activity is considered healthy:

"We walk a lot, our coordination gets better, to improve the reasoning [...] is a good service because the person is not without work, work is a means of distracting the head" (T7).

In contrast, the exposures arising from this activity harmful to health, and are perceptible in the speeches of some workers:

"Health is everything, I have a daughter of 7 months old, when I get home the first thing I do is take a shower, because we leave here with a hand full of Bacteria" (T8).

"My profession is healthy in terms, because there are people that eats things from trash [...] put his hand on trash pick things. This ends up polluting our bodies" (T9).

"Sometimes it rains, if you're not careful catches the flu, then pneumonia" (T10).

Risks related to the collector of recyclable materials activity health

This idea is present in the ideals and cognitions of the informants, since their core meanings, point to this understanding as we can see in the following lines: "For me my job affects my health because sometimes we have stirred recycling and dead animal found, and when you breathe it gives a little sick, your body is going pro, brings no benefit to your health" (T1).

"My profession affects health by getting in touch with a lot of garbage, too much toxic thing" (T2).

"Sometimes we stay with itchy skin and gets ringworm. Another dangerous thing is the glass in the garbage, we get cuts" (T3).

"People do not separate the garbage, we have to move, to separate, wash [...] walked much in the hot sun, so we have to drink lots of water, eat shit in the street, sometimes we do not even lunch" (T5).

"Affects my health more in the sense of acquiring a disease when we contacted something that is dirty" (T8).

As for the risks in developing the activity of collectors, we also noticed the presence of physical, chemical, biological, ergonomic, and work accident, identified in reports:

"Are you cold, heat, noise, humidity, dust, smoke, haze, contact with garbage, weight, stress, awkward position, since I cut myself, I suffered one scorpion sting" (T4).

"Sometimes I get upset, stressed, work more than 8 hours a day and have cut myself at work" (T6).

"Already drilled me with syringe, have contact with waste, lift weight, get in uncomfortable position, working at night, get stressed, I've cut myself and hit once, I had to take 3 points on the head, I've been bitten by insect and by venomous animals" (T7).

Of those interviewed, only two said to make use of PPE (gloves, boots, cap, and apron), while others do not make use of any equipment, although all have been shown to have awareness of the importance of their use.

Perceptions of waste pickers about accidents at work

For these workers, the health risks exist when a person deliberately is put at risk. The perception of the accident by the pickers, according to their experiences, proved a recurring, which can occur anytime within a normal range and that, is independent of working conditions:

"Accident at work happens when the person does not pay attention, do not see the transit of cars [...] have to be careful, it is a routine, any job can have accident" (T1).

"Sometimes cut, cut his finger with glass punch with thorns [...] the accident happens by accident of the person have to pay attention when going through that collection." (T2).

"Sometimes the picker to pick out drunk and crashes" (T3).

At this lack of assistance from social services and health, is also rooted in the participants the biomedical model, where they infer that go to the doctor when they need to, for some health problem or disease. Not valuing this way, the important aspects of disease prevention and health promotion, which can be analyzed in the following units:

"I went to the doctor when I suffered one scorpion sting" (T4).

"Went to the doctor when I presented respiratory problems" (T5).

"I always go to the doctor for tests, often have worms" (T7).

"I went to the doctor when I suffered a burn of insect [...] I went to the doctor when I was stuck with a nail, to see if I had tetanus" (T9).

DISCUSSION

The requirement of education and skilled labor is difficult for many people the opportunity to get a minimum income to satisfy their basic needs and health. The unemployment rate is increasing with decreasing years of study, which may affect the increase in the number of people seeking casual work in the solution of their problems¹⁰. In this scenario, the waste pickers, for socioeconomic reasons, use garbage as a means of survival in the activity and see how to get income and food, necessary components to obtain health.

It is observed that social subjects have the view that the garbage is a source of livelihood,

health and ability to work and therefore tend to neglect the relationship between work and health problems¹¹.

While a negative connotation is socially constructed around the activity, since it generates discrimination, prejudice, and no recognition of sociedade^{4, 12}.

The absence of all labor rights proves an obstacle to the promotion of health and quality of life of waste pickers, so that even notes the prevalence of informality in labor relations. There is no way to ignore the conditions under which the collectors develop their work exposed to numerous health risks by interfering in leaked looking for recyclable materials such as contamination and risks to physical integrity waste^{13, 14}.

Assess the health of these workers according to the concept adopted by the Ministry of Health, where health promotion depends on determinants and conditioning factors such as lifestyle, working conditions, housing, environment, education, leisure, culture, access to goods and services essential means understanding the collector as a whole being⁴.

Its recognition as a professional category and the risks and hazards arising from the exercise of their work are set out in Policy Health and Safety and should therefore be assisted to meet their health needs. The need to implement policies aimed at the health of these workers is a fact that cannot be ignored, since this profession is extremely important to remain minimal ideal sanitary conditions for all¹.

The lack of planning and management of waste disposal can aggravate health conditions and increases the risk of acquiring diseases. Improper disposal of household and uncompromising residue submit workers handling the waste in an attempt to select it, causing diseases such as worms, intestinal infection (diarrhea), influenza, leptospirosis, dengue, meningitis, headache, toothache, fever, allergy, malaise, loss of appetite, headache, nausea, and vomiting¹⁵.

Understanding risk as the probability that an expected or unexpected event becomes a reality, the presence of hazards in the work environment

is evident in that the collector of recyclable material is inserted¹⁶. This, in turn, performs in situations or areas where there is likelihood, susceptibility, vulnerability, chance or misfortune of some kind of threat occurs, danger, trouble, or disaster impact. Thus, these individuals often develop their work in sub-human, poor security and exposed to different situations, both physical and psychological conditions, condemning them to a tolerable quality of life and health risks¹⁷.

The strong physical load of grooming, added to deal with the rubbish, and the very routine work are factors that predispose to certain types of work-related diseases: occurrence of accidents such as cuts and punctures, burns, dermatitis, food poisoning, parasitic diseases as well as infectious diseases such as viral hepatitis and SIDA, resulting from poor conditions in which the activities are developed and the work environment that they are subjected¹¹.

In this sense, there is a resistance worker collector in relation to the use of the adequate equipment. Some report the nuisance to be uncomfortable or cause heat, and the loss of sensitivity for the handling of materials. These factors create some resistance to the use of PPE, so that such nuisance undermines their productivity, which can compromise their renda¹⁸.

Anthropogenic environmental risks and accidents constitute one aspect of the complex interaction of people with the environment. Knowledge of these risks are directly associated with reactions involving the perception of individuals and their experiences and connections with your living space¹⁹. Situations like pains, breathing problems, cuts, scrapes, poisoning by waste, and other diseases are faced by collectors as consequences of their work¹².

Also due to the absence of a critical, reflective and expanded perception, reflecting the lack of training or training disqualified, participants attribute the accidents to themselves and colleagues, not realizing the other dimensions that directly or indirectly affect the organization of their work processes, such as conditions and suitable places for the collection and selection of materials, lack of public health policies and education of this population, excessive exposure to risk factors, among others.

Still, in this context, it corroborates with Ferreira and Anjos¹³ when the authors argue that factors such as odor emanating from the liquids and toxic gases resulting from the decomposition of garbage, dead animals and other vectors can cause malaise, headache and nausea in workers entering contact with the waste.

It analyzes also the collectors mentioned exposure to these factors often. The risks are not given due importance and interest; since most workers reported not going to the doctor for a routine visit, however, attend the health service only when an accident occurs or when sick.

The collectors often do not seek improvements in working conditions, or the use of preventive measures with the aim of reducing the incidence of disease as well as damage, injuries and deaths caused by exposure to hazardous agents and conditions²⁰.

FINAL CONSIDERATIONS

This study allowed us to perceive the risk factors related to the health of scavengers which point to the subhuman conditions which are involved. For collectors, being healthy means is linked to the possibility of working, regardless of conditions which the activity is performed, so the damage on the health of these workers seem insignificant when compared to the need of production and guarantee their livelihood.

As reported in the results of this study, physical, chemical, biological, ergonomic and occupational accident were identified in the interviews, pointing to the need for change at this stage in order to reduce the potential risks present in the scavenger activity recyclable material so that it can achieve a better quality of life for the working class. The recognition of the collector of recyclable material while professional category and the risks and hazards arising from the exercise of their work are prescribed by law and should therefore be assisted to meet their health needs.

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