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# Work and risk experience among Northeastern migrant workers in sugarcane plantations in the state of São Paulo, Brazil

A experiência de trabalho e dos riscos entre os trabalhadores-migrantes nordestinos nos canaviais paulistas

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## **Abstract**

Every year thousands of workers from the Brazilian Northeastern states move to the sugarcane plantations in the state of São Paulo to work in sugarcane mills. Most of them are young with little schooling and come from peasant families. Among other things, researchers call attention to the risks to which these workers are submitted, related to transportation conditions, housing and work environment. The organization of work is always focused on increasing the surplus value, which has resulted in the deterioration of the labor force, expressed by several diseases and countless deaths of migrant workers. In the scope of this article, it is our intention to define “risk” concept and relate it to the processes of subjectivities and to understand the meanings that migrant workers attribute to the risks to which they are exposed during the trip and also in workplaces (sugarcane plantations). Regarding methodology, we used a qualitative approach. Data were collected through semi-structured interviews conducted with a sample of 12 migrant workers from the city of Santa Cruz da Baixa Verde (Pernambuco), in the Pajeú microregion, and also of cities located in the microregion of Serra do Teixeira (Paraíba), especially the surrounding areas of Princesa Isabel (state of Paraíba). The data allow us to assert the existence of an intrinsic relationship between the risks they run and the affirmation of the gender identity of the subjects investigated.

**Keywords:** Agribusiness; Migrant Worker; Risk.

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## Resumo

Todos os anos milhares de trabalhadores dos estados nordestinos se deslocam para os canaviais do estado de São Paulo para trabalhar nas usinas de cana-de-açúcar. Os que migram são jovens, com pouca escolaridade e oriundos de famílias camponesas. Dentre outras coisas, pesquisadores chamam atenção para os riscos a que tais trabalhadores estão sujeitos, riscos estes presentes nas condições de transporte, moradia e no ambiente de trabalho. A organização do trabalho está sempre focada no aumento da extração de mais valia, que tem resultado na degradação da força de trabalho, expressa nas várias formas de adoecimento e nas inúmeras mortes de trabalhadores-migrantes. Tencionando a noção de “risco” e relacionando-a aos processos de subjetivação, é nossa intenção, no espaço deste artigo, compreender os sentidos que os trabalhadores-migrantes atribuem aos riscos a que estão expostos durante a viagem e também nos locais de trabalho (os canaviais paulistas). Metodologicamente, lançamos mão de uma abordagem qualitativa. Os dados foram colhidos mediante entrevistas semiestruturadas realizadas com uma amostra de 12 trabalhadores-migrantes oriundos do município de Santa Cruz da Baixa Verde (PE), na microrregião do Pajeú, e também de municípios localizados na microrregião da Serra do Teixeira (PB), especialmente os circunvizinhos à cidade de Princesa Isabel (PB). Os dados permitem-nos afirmar a existência de uma relação intrínseca entre os riscos que se corre e a afirmação da identidade de gênero dos sujeitos investigados.

**Palavras-chave:** Agronegócio; Trabalhador Migrante; Risco.

## Introduction

Tavares and Santa Cruz da Baixa Verde are located in different Brazilian states. Tavares is located in the *Sertão* [semi-arid region in Northeastern Brazil] of the state of Paraíba (microregion of the city Serra do Teixeira) and Santa Cruz da Baixa Verde is located in the microregion of Vale do Pajeú [Pajeú Valley] in the state of Pernambuco. It is important to highlight that the cities have some common elements: configuration of the population; prevalence and importance of family farming; and, finally, the fact they are sources of seasonal migrants.

According to data from the 2000 Census (IBGE - Brazilian Institute of Geography and Statistics), Tavares had 14,103 inhabitants, and 63.07% lived in rural areas and 36.93% in urban areas. In Santa Cruz da Baixa Verde, the situation is not different: 11,768 inhabitants - 61.93% in rural areas and 38.07% in urban areas.

It is possible to observe the importance of family farming in these cities. Access to land by the farming families is fragile, since most agricultural establishments have an area less than five acres, making difficult to insert family groups at levels of socially accepted dignity.

The difficulty of access to land combined with rainfall irregularities and the lack of jobs and income in these particularly cities have historically favored the migration of family group members looking for work. In fact, Saturnino and Menezes (2007) noticed that the migration of Northeasterners to the the Brazil Southeast started in the 1930s. During the 1950-1970 period, there was an intensification of the Northeast-Southeast inter-regional migration, when about 2.7 million people have left the Northeastern rural areas to go to other regions of the country.

Even considering the positive impacts of the recent public policies for the rural population, such as Programa de Fortalecimento da Agricultura Familiar (National Family Farmer Strengthening Program), Programa Um Milhão de Cisternas (One Million Cisterns Program), Programa de Aquisição de Alimentos (Food Acquisition

Program) etc. - it is important to emphasize the limited and ineffective nature of these policies in view of the depth of the precariousness that historically affects the Brazilian rural population. Therefore, without alternatives to a source of work and income in their places of origin, the inhabitants of these cities temporally connect themselves to other spaces, searching for work to meet their needs and, ultimately, to reproduce their family group.

Although the migration in the places studied is an old practice, from the second half of the 1990s onwards there was a growth in the migratory flow towards sugarcane companies in São Paulo countryside (Rio Preto region) and Mato Grosso do Sul.

This migratory current is related to the present-day expansion processes of sugarcane industries and the consequent demand for workers for the harvest, since this activity was mainly manually carried out. Lately with the mechanization advance, there was a decrease in the number of workers hired by a large part of the mills of the state of São Paulo. Nevertheless, many sugarcane mills still require workers for manual harvesting since the mechanization process has not yet reached 100% of the planted area.

Concerning the migrant workers profile, researchers have pointed out that most of them are young male, poorly educated, and from family farming. Novaes (2007) e Menezes<sup>1</sup> reported that, although age is not an explicit criterion for the selection of workers, most of the selected and hired workers are composed of young people between 17 to 30 years old.

The selection of sugarcane cutters mainly happens in January, when these workers are approached in their places of origin - usually in the countryside cities of Paraíba, Pernambuco, Piauí, Maranhão and others states of the Northeast - by contractors, also known as *turmeiros* or *gatos*, responsible to locate and pre-select informal workers for the job. The pre-selection consists in obtaining information about the

candidates, considering their behavior in their places of origin, in previous harvests, and their average productivity. The idea is to contract a useful worker (capable to meet productivity averages) and, at the same time, docile, i.e., a worker who is not involved with unions, does not go on strike, does not question the fiscal inspectors orders or from other representatives (Saturnino; Menezes, 2007).

In the second selection phase, the main criterion is the state of health to carry out the hard work in the farming. In this stage, the selection agent is the occupational physician, who excludes those workers who have the possibility to develop pathologies that ultimately would impede finishing the work (Scopinho, 2000). After that, the healthiest workers are sent to an admission test and the other patients are excluded in the following steps. Thus, this medical practice is not always aimed to prevent, identify, treat or rehabilitate the possible pathologies that workers have or can acquire, but to exclude sick and susceptible workers.

Scopinho (2000, page 98) reinforces the idea of Silva (2006) regarding the selection of workers when stating that "the productive process [in sugarcane mills] started to demand a type of worker, whose main characteristic is to be [...] technically experienced, skilled and versatile and [...] personally committed to the business objectives".

During the sugarcane harvesting, these workers live in houses - called *barracos* [shacks] by them or in lodgings. This type of accommodation has its physical space divided into dormitories, bathrooms and showers, living area, dining room and laundry room. In many cases, each accommodation has an average of two hundred to three hundred workers living at the same place. The shacks are currently the main type of housing for the workers, even with the mechanization process development and downturn in the number of hired workers for the manual harvesting. These accommodations are located on the

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1 MENEZES, M. A. Rural youths in the Northeast: work, migration and social movements Survey Project. Universidade Federal de Campina Grande, Campina Grande, 2009. Mimeographed.

outskirts of small cities and usually consist of few rooms, mostly a kitchen, and a bathroom, a bedroom with bunk beds, a small living room and an external laundry area. These houses are home to an average of eight to ten men.

However, the migratory process herein analyzed involves more than going from their places of origin to search for resources to improve their lives. This essentially implies on inserting these men in a process of dangerous, unhealthy and hard work (Silva; Menezes, 2010; Alessi; Scopinho, 1994).

According to the Alves (2007, page 30):

Since the 1970s the sugarcane work process has been based on manual harvesting, lasting until today - normally, the worker harvests a 8.5-meter sugarcane rectangle, containing five sugarcane "streets" (lines where the sugarcane is planted, with 1.5 meters of distance between them), for a length that varies from worker to worker. This small rectangle contained in the larger rectangle, the plot, is called *eito* (denomination for cleaning a plantation in turns with a hoe) by the workers.

According to the Alves (2007), the *eito* size varies for each worker, because it depends on the sugarcane amount that can be harvested during a workday, being measured in linear meters. Such amount is determined, among other factors, by the type of sugarcane (good or bad sugarcane), as well as by the physical resistance of each worker, by the work pace and, therefore, by their physical and psychological conditions. That is the reason that companies try to control the various aspects of the worker life, especially their free time in order to ensure a strongly productive workforce.

However, according to Alves (2007), in addition to cutting sugarcane, the company also requires the worker to: (1) clean the sugarcane, eliminating the *pendão* (top of the sugarcane), (2) move the sugarcane to the center line of the *eito* (third line); and (3) arrange the sugarcane at the third line for transportation.

Moreover, Alves (2007) warns about the wearing of workers at the sugarcane harvesting. In his words:

A cutter that cuts six tons of sugarcane in a 200-meter length (8.5 wide) *eito*, walks during the day about 4,400 meters, giving 20 strokes with the machete to cut a bundle of sugarcane, what means 66,666 strokes per day (considering a standing, first cut, non-fallen, not rolled up sugarcane and with the density of ten canes at every 30 cm). In addition to walking and striking the sugarcane, the worker must, at every 30 cm, to bend down and twist the body to hold and strike the sugarcane very low to the ground and stand up to strike it on the top. And the worker carries various bundles of cut sugarcane to the center line. In other words: the worker carries in his arms 6 tons of sugarcane divided into bundles of 15kg, in a distance ranging from 1.5 to 3 meters, i.e., during part the 4,400 meters of walking.

Santos and Souza (2012) analyzed a workday of a sugarcane cutter and confirmed the numbers aforementioned may be higher, since sugarcane mills only hire workers who exceed the goal of 10 tons per day.

Although physical strength is an important issue during the hiring process, this does not mean strongest workers will have the best productivity. Worker's physical strength will be an advantage in this activity repeated extensively and performed outdoors, in an environment where workers are exposed to the climate conditions, as well as dust, soot and smoke during a workday that varies between 8 and 12 hours per day, 6 days a week (Alves, 2006).

Workers are instructed to use Personal Protective Equipment (PPE) to develop activities in cutting sugarcane. The clothing consists of a hat or cap, sunglasses, a handkerchief covering their necks and faces, long-sleeve shirt with quill, trousers, boots with a steel toe, pants, shin guards and leather gloves (Rocha, 2007; Alves, 2006).

During work sugarcane cutters are exposed to high temperatures, rain, dust, and soot from the burning of sugarcane, venomous animals (found in sugarcane fields), accidents at work, such as cuts, falls and to the intense body movement that results in inappropriate postures. This range of risks can be aggravated by wearing lot of clothes that cover their body, or even by the poor quality of the PPE provided by sugarcane mills (Alessi; Scopinho, 1994).

In the face of physical effort expended and situations to which they are daily exposed, the work in manual sugarcane harvesting implies lots of risks to physical and mental health of workers. The risk factors are from the conditions found in the work environment and housing conditions, which can lead to diseases or even death (Rocha, 2007).

Thus, considering the hardship and dangerous nature of this work as well as the conditions under which migrate workers move to the countryside of the state of São Paulo, our intention in this article is to understand the perceptions of the migrant workers on the duty, as well as on the risks to which they are subjected, whether on the trip or in the work environment itself. We try to understand the various meanings that migrant workers attribute to these risks, working with the experience hypothesis that these risks are related to the affirmation of their gender identities.

## Methodology

Methodologically, we have used a qualitative phenomenological approach. The study is focused on the cities of Santa Cruz da Baixa Verde, located in the Pajeú microregion and the city of Tavares, located in the microregion of Serra do Teixeira, in the state of Paraíba.

The data were generated during 2010 to 2014, through the use of semi-structured interviews, whose purpose is to obtain information in the interviewees' reports. Since individual speech reports reveals systems and values, we seek to understand the structural conditions, systems

of values, norms and symbols, which express the representations of certain groups, in historical, social, economic and cultural conditions.

The sample of participants, in this study, has not been defined previously but it was built during the search process. Thus, the scaling of the number of interviews followed saturation criteria, which consists in the knowledge formed by the researcher, in the field where the researcher was able to understand the inner logic of the group or collectivity (Minayo, 2010).

The interviews were conducted during the harvest, at places of destination, and during the off-seasons, when workers return to their places of origin. Thus, the participants of this study were men, sugarcane cutters, migrants from different age groups who already migrated to work in sugarcane manual harvesting. These men have the common characteristic of being small producers or family farmers who work on the land. We interviewed 12 workers during the development of this paper.

The process of analysis initially consisted in the complete transcription of interviews. Then, it was decided to use thematic analysis method, with the purpose of discovering the units of meaning that enable communication, whose frequency identifies something for the object of analysis (Minayo, 2010; Bardin, 2009).

All the procedures performed during the study followed Resolution No. 196/96 of the National Health Council. The interviewees participated voluntarily, through their free consent and approval - all of them had their identity preserved, using fictitious names to ensure anonymity and confidentiality of the information. The protocol was approved by the Ethics Committee of Faculdades Integradas de Patos (FIP) under number 037/2011.

## Work experience of the migrant workers

Asked about what they think about the work in the sugarcane harvest, the migrant workers interviewed tended to start their speech by saying "in the fields, the service is good, is not too



bad” (Dario, 40 years old, migrant worker from Tavares). Declaring that the service is good does not mean, however, the workers have no consciousness about its inhumane and even indecent aspects. Thus, to understand the good qualification attributed by the workers, we need to understand what this work means for them. Let’s take a look on this interview with two migrant workers, both from Tavares.

- *What about your work? What do you think?* (Researcher)

- *It is arduous... I attended a meeting with that woman who said on TV that one worker is capable to give seven thousand strikes per day.* (Vanildo)

- *It is a daily fight because this is not an easy job...* (Adilson)

- *Now that the Northeast raised ninety percent because of the sugarcane harvesting.* (Researcher)

- *Regardless all the suffering, Vanildo, this increase is helping a lot people from the Northeastern region. Because the Northeast region is always a poor area, and we go to the mills to work... Who uses the head to value the earnings... you notice some nice improvements: buy a small house, buy a little piece of land, a motorcycle, cattle...* (Adilson).

- *It has been helpful...* (Researcher).

- *I really believe that it has been very helpful.* (Vanildo).

Thus, it is not that workers do not feel the weight of the work; it is the fact when they evaluate the work in the sugarcane crops, and they do it considering their living conditions in their places of origin as a parameter. In addition, they emphasize the migration role and their insertion in the sugarcane plantations of the state of São Paulo for reproduction and for their family groups. This has favored the economic dynamics processes of the small cities of the Northeast where this workforce is originated. And it is from these considerations that we can understand the following quotations:

*If the city where I used to live [in the semi-arid region of state of Pernambuco] had job for the people, no one would come here... Getting up at four o'clock in the morning, it does not matter if it is raining or it is sunny but you have to go because the work there during the winter is in small farms. The payment for a workday in small farms is about fifteen reais (Brazilian currency); here you can get thirty, forty, fifty reais. Besides that, it is difficult to find work for the whole week* (Francisco, 24 years old, single, from Santa Cruz da Baixa Verde, Pernambuco).

*I cannot complaint about the work because I have taken twelve trips to Unisinas and when I left the house with my woman, I just took an old mattress and some beans that my father gave me; I didn't take anything else because I had nothing, and thank God, I already got some things since I arrived. So, I cannot say the job is bad...* (Edvaldo, 30 years old, married, from the city of Santa Cruz da Baixa Verde, Pernambuco).

Although some of the workers evaluate positively their work in the sugarcane harvesting, they do this from another parameter: their previous labor activities. For example, Cícero, 34 years old, education incomplete, 5th grade, from Princesa Isabel, Paraíba - we encounter him in Novo Horizonte, São Paulo, where he lives with his wife and 3 children (7, 10 and 9 years old) and one 20-year old brother and one 18-year sister. For Cícero, working in sugarcane fields is fortunate. In his words: “here we have luck, it is tough, yes sir, but we face it because we really need it. Imagine you working 11:30 - 12 hours a day, under the heat, cutting sugarcane, making less than twenty reais - and 60% of sugarcane is fallen cane [reed] roll”. Cícero arrived at Novo Horizonte in 2003 and before that, he lived from 2000 to 2002 in Sorocaba, São Paulo. In his first year, he lived in his brother-in-law’s house, worked at a brick cement factory. He states that time was worse and harder than working in sugarcane crops. According to him, at 11 am he had to pick up the a cement column with his bare hands

and put it on the truck. He says it was “very, very hard” and keeps saying:

*My hands were in blood. There was a column weighing up to 100 kg. If I stayed there another year, I would not survive. Sometimes I could not even hold a plate - and this for a 450 reais salary. I quit and then, all could not pay my bills. I came back home (Princesa Isabel), spent about 6 to 8 months and then I left and I got here. I worked as sugarcane cutter for 3 years and a half in São José Mill. And then I left São José Mill because they were dismissing workers, I got unemployment insurance for a while. In 2007, I worked for the supplier. I have plans to move back to Princesa Isabel. Maybe it will work or maybe not because I might not have financial condition to return. (Cícero).*

The concept of experience forged by E. P. Thompson helps us to understand the migrant workers attitude. In fact, for Thompson (1981, p. 182), men and women tend to experience “their productive relations, as they experience their determinate situations, within ‘the ensemble of social relations’, with inherited culture and expectations and as they handle these experiences in cultural ways”. In other words, they elaborate their feelings, their ways of thinking and acting from their cultural universe and belonging (Silva; Menezes, 1999).

In this sense, their evaluation of working in sugarcane plantations is influenced not only by their previous job experiences or their situation when they used to live in small cities of Pernambuco and Paraíba. Their evaluation is more based on the value they can attribute to the work, the value of being a man, provider and worker. Like the construction workers interviewed by Borsoi (2010), among the Northeastern workers working in sugarcane fields, work is understood as a value related to gender identity. To be a man is to be a good worker and provider. In other words, for these men:

Work is understood very early as something that requires strength, physical disposition

and effort. And these characteristics are learnt since their childhood. Work is synonymous of survival, it is almost an organic feeling, naturalized. Therefore, must be faced, never feared whatever the proposed/imposed task (Borsoi, 2010, page 311).

*Men have to work!* This phrase is often said by migrant workers. Said by one to the other, it has only one meaning: work, hard work is part of their life. In fact, it is a condition of their life itself. A man does not live without working, said João (migrant worker from Tavares); and, when we asked him why, he added: “unless you go to do something stupid, living at the expense of others, stealing...” To be a man but a right man: honest, a man of character, therefore, is related to working hard. Hence the distrust toward those who, in their places of origin, bear wealth that is not related to heavy work.

Author Sarti (1996) points out to the importance of the labor value for the male identity affirmation among poor people. For the author, “work is much more than an instrument of survival material. It constitutes the male identity substratum, forging a way of being a man. It is a condition of their moral autonomy: the positive affirmation of themselves” (Sarti, 1996, page 66).

And it is through work that the migrant worker asserts himself as a good person and as a man. But the author stresses that if the affirmation of virility passes through work and the willingness to work. Therefore, associated with the health notion, it also demands the existence of a “family”, so that “the morality of man, who has strength and willingness to work, articulates with the morality of the provider who brings money to home” (Sarti, 1996, p. 72-73).

Therein lies the importance of hard work for them, since it is through this work that they can socially assert themselves, as well as to meet social expectations of their groups of origin.

Having internalized the work as a value, through socialization process, even recogniz-



ing the difficulties in the sugarcane harvesting, they tend to judge this activity as a reference in small cities in the microregions of Princess Isabel and the semi-arid region of Pajeú. This evaluation is a positive balance for the work in the sugarcane harvesting, since both types of work are harsh, but, unlike the plantation, the workers earn “good money” cutting sugarcane, and this provides them some income and access to goods and services.

Moreover, for being heavy, the work makes possible affirming their gender identities, since the image of a man, which is internalized by them, is identified with “people who work” and this is a source of social prestige within their neighborhood and kinship.

But, if on one hand the work in the sugarcane plantations favors these workers of the semi-arid region from Paraíba and Pernambuco, it also has contributed to their self-assertion as men and providers of their families. On the other hand, working conditions and relations in the São Paulo sugarcane plantations have affected the bodies and minds of these workers, marking them with signs of illness, even causing death. As Dárcio (24 years old, migrant worker from Juru, Paraíba) said: “I think workers choose this because we need it and there is no other option around here... You know who’s going but you don’t who’s coming back... One year cutting sugarcane means losing two years of your life” (Dárcio).

## The experience of risks by Northeastern migrant workers

The worker herein analyzed belongs to a vulnerable social group because are inserted in working conditions and relations marked by heavy work, insalubrity and dangerousness. It is important to point out that their insertion in the sugarcane industry - as sugarcane cutters - results in vulnerability processes of their living spaces in small cities of the Northeastern states, marked by difficulty to access to land, poor soil quality, irregularities in rainfall and

lack of public policies development to reduce the poverty effectively.

Even considering the formalization process of labor relations in the context of sugarcane companies - favoring a significant decrease in informality in the sector - and the various agreements signed by companies, unions and the State aiming at appropriate work conditions to ensure minimum dignity levels for workers, it is important not to lose sight of the fact that such agreements are never fully implemented; in practice only disseminating ethanol as a clean fuel produced with decent conditions and labor relations (Santos; Gurgel, 2013).

But what can be observed when visiting most of the Brazilian sugarcane plantations is that the labor exploitation is still present. Lunch or coffee break is not respected. Workers are encouraged to achieve and even exceed current productivity averages.

They are workers are exposed to several risks during the activity. The Brazilian National Occupational Safety and Health Policy classify occupational risks into three types: (1) **Environmental risk**: physical, chemical and biological factors; (2) **Situational**: ergonomic and psychosocial factors; (3) **Human or behavior**: mechanical and accident factors.

According to Regulation No. 9 (NR-9) from the Brazilian Ministry of Labor and Employment (MTE): “in the workplace, physical, chemical and biological factors are considered environmental risks that, according to their nature, intensity and exposure time, can affect workers’ health” (Brazil, 1994).

The decree considers physical risks the “set of factors to which workers may be exposed, such as sound, vibrations, abnormal pressure, extreme temperatures, ionizing radiation, etc.” Chemical agents are “substances, compounds or products that may penetrate the body through the respiratory system such as dust, smoke, haze, fog, gases or vapors, or may be in contact with or absorbed by the body through skin or ingestion”. Biological agents are “bacteria, fungi, bacilli, parasites, protozoa, viruses, among others” (Brazil, 1994).

Regarding situational risks, we have those related to ergonomic risks (poor posture) and to fatigue and tension, among others (Chiodi; Marziale, 2006). Finally, human or behavior risks are present in every work environment, such as floor conditions or inadequate lighting (Silva; Zeitoune, 2009).

Considering specifically the migratory process herein mentioned, as well as the sugarcane harvest activity, we can point out the main risks for migrant workers.

As sugarcane cutters, migrant workers are susceptible to physical risks due to high temperatures and exposure to ultraviolet rays. There are also risks related to the exposure to sugarcane soot as well as biological factors such as snake bites.

There are also situational risks related to the fast-paced work environment. In addition, sugarcane harvesting is an activity that requires many body movements such as: bending down, holding a certain quantity of sugarcane, lifting and lowering the machete, carrying the sugarcane cuts to a specific place, arranging them in loads to help the work of the harvesting machines. All this repetitive movement can cause serious physical consequences to workers, such as repetitive stress injuries (RSI) and other musculoskeletal and osteoarticular injuries.

And finally there are risks of accidents during the migratory journey (leaving and returning to their cities) and in the workplace itself, since workers are paid by production (in outdoor areas) and they cannot properly monitor the terrain characteristics.

According to Lupton (1999), risk can be approached from realistic or technical scientific perspectives and from social constructionist approach. In the latter case, the risks are considered as social and cultural aspects, and thus are denaturalized. It is a matter of discussing the notion of risk, assuming that different subjects tend to experience and give different meanings to risk situations.

Migrant workers are aware of the risks they are exposed to during the harvesting season.

Here is what Mr. Damião has to say (40 years old, married, Tavares):

*The real danger of this work is encountering with snakes. There are lots of them. But I never heard about anyone dying because of it. There are lots of snakes because the fire doesn't burn it all, so they run from the fire and hide in the sugarcane straw. The worker gets used to this animal. **See how workers gets used to bad things! The worker doesn't even care... I'm not afraid of snakes.***

*About the diseases... we breathe that soot. That can be harmful to us after a while. I had pneumonia once because of it. But after I got here, I everything is fine. (Damião).*

The interviewee addresses biological risks (encountering with snakes) and also risks related to chemical agents (soot). For Mr. Damião, with the end of plantation fire and the introduction of mechanical harvester, biological risks increase once the raw sugarcane cutting (with no fire process) increase the risk of encountering venomous animals, specifically snakes. On the other hand, when the sugarcane is burned, the biological risks decrease. However, in the latter situation risks related to chemical factors increases (the soot is inhaled). According to Roseiro and Takayanagui (2004, p. 80):

This process interferes directly with the population health since the burning of the sugarcane straw releases pollutants; the main damage is air pollution. Consequently, by the health point of view, excessive emission of carbon monoxide and ozone cause damage to the soil, local, native and cultivated plants, fauna and population.

According to Fabiano (30 years old, married, living in Santa Cruz da Baixa Verde, Pernambuco), working in the sugarcane harvesting involves constant risks. In his words:

*After five days living in the city the work started. No work contract. It is bad, isn't? **We***

**take the risk. We take the risk of suffering an accident, cut injury, being bitten by a snake. But the worse thing is not having a work contract. Those who are working there are taking the risk. And even the family. We don't know if everything is Ok with them. Sometimes our families need something and we are far away, and cannot help. So everything goes bad. And working in outdoor areas, we don't get anything except disease. Never heard about someone getting rich cutting sugarcane. You just get sick.**

**This kind of job can make you ill. Not only for me, but for everyone. It is very dangerous. There's a lot of poison, strong poison. It is harmful to your health. Only thing I can say is that it's very dangerous. The sugarcane soot can be very harmful to a person. Dirt in the lungs can give you cancer. The soot we breathe remains in our lungs and it can cause black spots. It can kill you.**

In addition to the risks generated by chemical factors (poisons, sugarcane soots), Fabiano also points out the risks of accidents, pointing out the cuts caused by the machete (*podão*) handling or even with the sugarcane leaf when it is cut raw. This type of accident can be considered common. In addition to superficial cuts, there are occurrences of deeper cuts, which can lead to serious injuries: loss of limbs or physical disabilities. In Antônio's speech (60 years old, married, living in Santa Cruz da Baixa Verde, Pernambuco) we identify this type of incident - he experienced and witness it.

**I saw people getting cut, a lot of times. Sometimes, people lose their fingers and toes. I had an accident but... Well, it was not serious. I was edging the machete. My finger slipped and I cut myself. I got a work leave for only few days. Maybe three or four days. This was the only accident I had. Thank God!**

Other common accidents in sugarcane plantations are falls or tumbles caused by uneven

ground. The workers need to be aware this situation. Benedito (30 years old, married, living in Tavares, Paraíba) suffered an accident in 2007, making him incapable of working. He slipped on sugarcane straw, fell into a hole and injured his knee joint.

*I used to work in farms harvesting sugarcane. I was cutting the straw and then I fell into an armadillo hole and I twisted my knee. Even feeling pain I continued to work one more month... I injured my knee. The doctors said it was nothing, but now I can't work, I really can't. I cannot carry weight because my leg shortened after the accident.*

In our opinion the social effect of risks is produced regardless of the earnest of interpretations based on a scientific perspective (Beck, 2011). The writings of the author help us to understand the concept of risks in modern life and how we could see this when analyzing this concept in the life and work context of sugarcane cutters.

In the Labor Safety speech, we can find elements and conducts that have been developed to identify and prevent individual risk situations experienced by these workers. There are many PPE available in the market to prevent accidents at work, but the difficulties in adapting this equipment to the body can directly influence the use of them. Porto (2012, page 35) points out that "a contextualized analysis [...] could reveal that PPE is often inefficient, expensive, extremely uncomfortable in hot environments or incompatible with the productivity demand required by the managers".

Companies are still advising and demonstrating how this equipment is important, emphasizing the responsibility of the worker in using them to prevent accidents. This situation does not put the responsibility on employers (and managers), since safety regulations were adopted but the proper use of the equipment was not observed. Thus the responsibility lies on

workers, which make them, by definition, also responsible for accidents, disabilities and death.

On the other hand, when analyze more complex risks, such as those related to the control of climatic conditions (called environmental risks), inhalation of sugarcane soot and pesticides used in the plantation (chemical risks). These risks are mentioned by the Labor Safety.

As we already have emphasized throughout this article, workers in the sugarcane industry are exposed to several risks during their activities performance, making them notably vulnerable to illness processes. Silva (2014) states that accidents and diseases are part of the daily life for those who works in sugarcane harvesting. Among diseases, the author point outs cramps, muscular pains, RSI, as well as infections, fever, pneumonia etc.

By removing the individual from the public space, confining him in a private one, the disease represents, for male subjects, the questioning of their gender identities. "Sickness always corresponds to shame for a man because he cannot work while sick", says Dejours (1992, page 33).

Nardi (1998) emphasizes that diseases or accidents at work remove the male subject from the public space, confining him in a private sphere (the place of the feminine in the imagery of these social groups). So, in this way, being injured or sick implies mental suffering for the person who will feel ashamed and guilty for not being able to meet the demands related to the role of a worker and a provider. For the workers herein mentioned, it is necessary to consider their fear in being injured or getting sick because for them this represents problems to pay bills and assistance of their fellow from work (Silva, 2014).

It is important to mention the exploitation mechanisms in sugarcane companies that aim at ensuring high levels of productivity and affect payment - by production -, which has been identified as the cause of workers' exhaustion (Guanais, 2011). Far from their families, in the São Paulo countryside, these men need to ensure the survival of their family. So they monthly

send financial help to their family members who remained in Northeastern cities and also to save resources that may be invested in cattle, land, remodeling of their homes etc. This context explains that workers strive to meet the production goals stipulated by sugarcane companies, even knowing they will have to make an extra effort that can lead them to diseases and even death.

Those who refuse to sacrifice for the "progress" represented by the sugarcane industry or those who fail to meet the sector demand are considered losers. Until recently it was common, in the workplace, for workers to receive titles like "golden machete" (the most productive workers) and "rubber machete" (the less productive workers). These workers were often mocked by their colleagues as well as being devalued by inspectors and recruiters. Moreover, their names are put in a black list, marked as "low productive" and are discarded in future harvests.

Given the mechanization progress in sugarcane harvesting, today mills can select the most productive workers. However, as Rocha (2007) states in his work: within the scope of mechanized work, exploitation has intensified.

Concerning sugarcane cutters replaced by machines, these workers have been transferred to other sectors - for instance, the civil construction industry, where heavy work, risk level and insalubrity conditions are almost similar to the sugarcane sector. There is a certain difficulty for these men to find a decent job mainly because of their low level of education (Menezes; Silva; Cover, 2011).

## Final considerations

It is clear that migrant workers from the sugarcane sector are constantly exposed to the risk factors that may trigger or develop at some point in their life the most varied pathologies. With this study, it was possible to understand that migrant workers name and recognize risks events in the sugarcane harvesting. A risk notion is strongly highlighted by the speech of Occu-

pational Safety and Health, which determines which are the healthy, safe and correct conducts that these workers should follow.

The data allowed us to assert the existence of an intrinsic relationship between the risks they run and gender identity affirmation of the subjects investigated. It was possible to identify that there is an evaluative relationship between being a man, a provider and a worker - although being exhausting and dangerous - that is related to how the male identity is affirmed. This self-affirmation of virility passes through work and willingness to work and is therefore associated with the notion of health; moreover, this representation is closely linked to the existence of a family that demands the sustenance by this worker.

It is also important to emphasize that social vulnerability of migrant workers also make them vulnerable in their working environments at the mills, exposing them to risks and diseases. Once injured or ill, these workers begin to question their own gender identities, since accidents or diseases take them away from working and impeding them to help their families groups. Being an injured man or sick I related to the fact of being incapable, marginalized, blaming for the situation faced and that tends to be experienced under the sign of mental suffering. Preventing such suffering from spreading implies engaging in the struggle for healthy and decent work environments. Here is the challenge of those who are in the same situation of these migrant workers.

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#### **Authors' contributions**

Nunes, Cordeiro and Silva participated in the conception of this article as well as in the writing and critical review. Silva e Nunes did the research as well as the analysis and data interpretation.

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