ISSN: 2230-9926

Available online at http://www.journalijdr.com

IJDR

International Journal of Development Research
Vol. 12, Issue, 11, pp. 60179-60186, November, 2022
https://doi.org/10.37118/ijdr.25757.11.2022

RESEARCH ARTICLE OPEN ACCESS

REALITIES EXPERIENCED IN RURAL AREAS OF SOUTHERN BRAZIL: A STUDY ON THE WORK OF PERSONS WITH DISABILITIES AND THE ASSISTANCE OF PRIMARY HEALTH CARE PROFESSIONALS

[1]Luciane Maria Schmidt Alves, [2]Morgana Pappen and [3]Suzane Beatriz Frantz Krug

[1]Professor and Coordinator of the Undergraduate Nursing Course at the University of Santa Cruz do Sul
[2]PhD student in the Postgraduate Program in Health Promotion at the University of Santa Cruz do Sul
[3]Lecturer in the Graduate Course in Nursing and Medicine and in the Graduate Program in Health Promotion at the University of Santa Cruz do Sul

ARTICLE INFO

Article History:
Received 07th September, 2022
Received in revised form
14th September, 2022
Accepted 09th October, 2022
Published online 30th November, 2022

Key Words:

Workers' Health, Persons with Disabilities, Rural Area, Occupational Accident.

****Corresponding author:***
Luciane Maria Schmidt Alves

ABSTRACT

This study analyzes the realities experienced by persons with disabilities (PWDs) at work in rural areas, as well as the challenges faced by the Primary Health Care Professionals (PHC) that provide services to this population. Qualitative research was conducted in five rural municipalities in southern Brazil where family farming and tobacco farming activities are predominate. The data were evaluated using Content Analysis. The results show that rural work is recognized as a health hazard; child labor and work accidents have been experienced by several generations of family members; many PWDs mitigate mental suffering and musculoskeletal pain with the use of medications. Little prevention and few health promotion services are performed by PHC and mutual aid is a characteristic of rural communities. This study indicates the importance of the visibility of the rural environment as a space for work and for the organization of individual and collective life among PWDs.

Citation: ***Luciane Maria Schmidt Alves, Morgana Pappen and Suzane Beatriz Frantz Krug.*** "Realities experienced in rural areas of southern Brazil: a study on the work of persons with disabilities and the assistance of primary health care professionals*", International Journal of Development Research*, 12, (11), 60179-60186.

INTRODUCTION

Work, from the last centuries and the social changes that have occurred, has generated a great impact on economic and political issues. It is also considered a central point for the formation of one's identity (Santos and Carvalho-Freitas 2018a). In regards to work, between the 1970s and 1980s, a field of practices and knowledge called worker health emerged in Brazil. It encompassed technical, social, political, and human aspects, with issues aimed at promotion, prevention, and surveillance with a specific focuson the health-disease process in its relationship with work (Gomez, Vasconcellos, and Machado 2018). In respect to workers with disabilities, work is a form of social insertion and through this"Persons with disabilities (PWDs) have their survival guaranteed and their self-esteem elevated.Work provides these individuals with full personal and professional fulfillment and the recognition of their full citizenship not only in law but in fact" (Santos and Borges 2018, 110.

Thus, the lack of having an opportunity to work, besides being detrimental to survival, reaches "the realm of human dignity," since work favors the development of individuals as members "who are part of a concrete, territorially instituted society" (Santos and Borges 2018, 98). Even with the advance of the legislation regarding the inclusion of persons with disabilities in the labor market, this reality is still far from being fully achieved. Studies point out challenges such as prejudice, discrimination, the unpreparedness of companies, lack of accessibility, as well as the low qualification of PWDs. In this sense, it is understood that the existence of laws is not enough. Governments must implement public policies to facilitate this process. Also, the inclusion of fields of research is needed to promote reflections and actions for a more inclusive society (Neves-Silva *et al.* 2015). There is a need for more scientific subsidies with propositions directed to this population that help guarantee their social rights, including work (Rodrigues, Aoki, and Oliver 2015). It is important to highlight that from the 1960s on there was a worldwide movement

with the purpose of creating public policies that could give more visibility to this segment of the population. "Among the steps taken by international policies to encourage the work of PWDs is the mandatory reservation of vacancies and tax incentives for business contributions" (Santos and Borges 2018, 98). Disability acquired through workplace accidents, the result of trauma, contusions, or serious injuries, represents a disruption of the previous world, requiring the individual to adapt to the new reality (Wellichan, Dos Santos, and Lino 2019). Data from the 2007 International Labor Conference, point out that more than half of the world's PWDs acquire some type of disability after the age of 16, especially during their working lives. Work accidents here understood as those that also happen on the way to the workplace, represent the main cause of disability (Santos and Carvalho-Freitas 2018b). Data from the 2013 National Health Survey (NHS) reveal that 12.4% of the 4.9 million people in the age group of 18 years or older suffered a work accident and were left with some after-effect or disability, and 32.9% stopped performing usual activities (IBGE 2016).

In the reality of work and life for PWDs, when considering the rural scenario, more aggravated difficulties are seen compared to the urban environment. Cultural aspects, living habits, and the difficulty of obtaining access to health care are factors that make up their reality. This includes limitations that refer to health services, with distant places of access to the service, absence of public and private transportation, as well asthe high cost of these services. Barriers such as these, added to the physical or intellectual characteristics of people with disabilities culminate in greater invisibility of this population, limiting their possibilities (Zeni *et al*. 2020a). Data from the Brazilian Institute of Geography and Statistics(IBGE -InstitutoBrasileiro de Geografia e Estatistica - 2010) infer that in Brazil, there are 46 million PWDs, and of these, 15% (7,132,347) live in rural areas. When living and working in the countryside, a condition that involves the frequent handling of agricultural materials and equipment, there is, consequently, a greater propensity to have accidents resulting from their use, which, in many situations, are responsible for limb amputations and/or the development of other disabilities (Cervi 2015). On the one hand, with the implementationof the Unified Health System (SUS – Sistema Único de Saúde) and the expansion of Family Health Strategy (FHS) units in Primary Health Care (PHC) in Brazil, the number of health actions in rural areas has increased. On the other hand, the development of public policies is still precarious, sometimes neglected (Silva 2017). In rural areas, workers are exposed to several occupational risks, which according to Silva and Fonseca (2020) are classified as ergonomic, physical, chemical, mechanical, and biological. Regulatory Standard number 04, specific to safety and medicine in the work environment, establishes that the risks at work are presented on a scale that varies from 01 (minimum) to 04 (maximum). Several jobs in the rural area have a03 risk level, considered to be a high-risk environment. Thus, these workers perform risky activities that damage their health and leave future after-effects (Silva and Fonseca 2020). It is noteworthy to highlight data on occupational accident notifications in the state of Rio Grande do Sul/Brazil, from 2012 to 2018.During the period, 278,277 cases were recorded, 25,578 of which involved agricultural workers (IBGE 2017).

The invisibility or lack of assistance for people with disabilities in PHC services highlights a cycle of vulnerability associated with disability, which leads to precarious situations: for job opportunities, housing conditions, transportation, access to culture and leisure, among other issues that deny access to the rights of this population (Rodrigues, Aoki, and Oliver 2015). It is paramount that the pluralities of the rural sector be evaluated to consider the reality of the health conditions of these people, to ensure assistance that permeates the success of problem-solving (Silva 2017). The present study recognizes the rural setting as a unique area, in which the geopolitical, social, cultural, epidemiological, organizational, and work characteristics are specific; however, little is known about this specificity. Therefore, this work intends to give visibility to this theme.

The study deals with work-related health problems in rural areas as an important social determinant of the health-disease process and of the living conditions of persons with disabilities. Work-related diseases "are diseases produced or that have their course modified, anticipated, or aggravated by working conditions" (Brazil Government 2018, 73). The work accident is understood as "a sudden or acute event occurring during the exercise of work activities, which may result in the loss of time, material damage, and or injuries to the worker [...]" (Brazil Government 2018, 69). Given this context, this study analyzes the realities experienced by persons with disabilities that work in rural areas, as well as the realities of Primary Health Care professionals that work with and provide assistance to this population.

METHODOLOGY

This research is anchored in the theoretical and methodological model of dialectical historical materialism, which constitutes not only a philosophical conception but also an epistemological and sociological conception of reality. As Fernandes (1987) points out, it is a way of understanding reality that rejects the existence of a spiritual principle and links it to material conditions and their transformations. In the case of the present study, this implies discussing issues involving workers' health, rural areas, work-related health problems, persons with disabilities and PHC; not with consensual understandings in society, but rather as the result of historical processes marked by conflicts, by antagonisms implied and conditioned by the very structuring of life in society. Hence, we seek to analyze the realities experienced by persons with disabilities that work in rural areas, as well as the realities experienced by Primary Health Care professionals that work with and provide assistancetothis population. Our perspective comes from an understanding of the historical dynamics of the capitalist production mode and how this dynamic conditions the work in society, the ways of organizing the work process, and the historical forms of insertion of individuals in these work processes. Thus, not only are health problems conditioned by this historical dynamic, but also by how they are understood and by interventionsthat express the different and contradictory responses to the social problems involved in them.

The research, of qualitative approach, was carried out in six municipalities in the central region of the state of Rio Grande do Sul, located in the south of Brazil, belonging to Health Region 28 and the 13th Regional Health Coordinator. These municipalities have a rural population of more than 70%. Due to the COVID-19 pandemic, two municipalities did not participate in the research with the indication of PWDs for the interviews. And one of them had the participation of only one health professional. Therefore, one selected municipality did not participate in the study, totaling five municipalities in the study.
Regarding health care in these municipalities, almost all of them have 100% coverage fromFamily Health Strategies (FHSs), which provide primary health care services. Some municipalities have hospital care which partially meets the needs of medium complexity. However, many specialties and high complexity care cases are referred to the regionalized reference centers and agreed upon by the management. The municipalities have their economies sustained by the rural context through family agriculture, and their production is concentrated in tobacco, soy, milk, wheat, corn, livestock (pigs), and vegetables. The main contexts of health vulnerability for the residents of this region are related to agricultural work, the aging process, and non-communicable diseases. The workers in the rural setting of the studied region face numerous limitations due to a lack of access to technological resources. They also perform considerable amounts of manual labor and with exposure to various occupational risks. The health professionals who participated in this research were eight nurses working within the Family Health Strategy (FHS) of the studied cities, respectively, one from Vale Verde, one from Gramado Xavier, one from Herveiras, three from Vale do Sol, and two from Sinimbu. The fifteen PWDs indicated by the professionals to participate in the research lived in four municipalities: Herveiras (two PWDs), Sinimbu (six PWDs), Gramado Xavier (three PWDs), and Vale do Sol (four PWDs).

For data collection, a questionnaire was applied to the nurses belonging to the FHSs, between November 2020 and February 2021. However, it is important to mention that the number of participating professionals was affected by the COVID-19 pandemic and municipal elections, which changed the management of some municipal health secretariats. The reasons for the nonparticipation of professionals were sick leave, lack of professional staff, or recently hired professionalswho did not feel prepared to answer the questions because they did not know the local reality. These factors also impactedthe number of interviews with PWDs, since the identification and contact with these people occurred through the help of professionals from the FHS teams. The data collected with health professionals showed aspects related to the occurrence of accidents and work-related diseases in rural areas; the existence of persons with disabilities due to a work-related injury; characteristics of the rural setting as a generator of work-related health problems, specifically for workers' disabilities; and the worker's health assistance developed by FHS health professionals in rural areas. The inclusion criteria for participation in the research considered the need to be a health professional of the FHS in the studied municipality and knowledgeof the community.

Subsequently, data with PWDs were collected through interviews carried out in their homes or at the reference health service. The subjects were contacted through professional nurses and Community Health Agents. The interviews showed the coping strategies of workers affected by a work-related injury. The inclusion criteria for the study participants were related to the fact that they were a person with a disability (PWD)as a result of their work, over 18 years of age, and living in a rural setting. The interviews were recorded and later all the statements were transcribed. The data were analyzed following the theoretical and methodological framework of dialectical historical materialism, respecting the categories historicity, totality, contradiction, and mediation, which were organized after data collection and interpreted based on Content Analysis, proposed by Minayo (2014). Finally, all data were organized in a mosaic. The results are organized into thematic categories, labeled: Socio-demographic and occupational profile of the study participants; experiences related to the work of persons with disabilities in rural areas; perceptions of PHC professionals about the work realities and health assistance developed in rural areas. The study followed the legislation that addresses research with human beings, expressed through Resolution No. 466, December 12, 2012, of the National Health Council (Brazil Government 2012), approved by the Research Ethics Committee of the University of Santa Cruz do Sul (UNISC) under ruling No. 4,365,126. The participants signed the Informed Consent Form (ICF)

RESULTS

Socio-demographic and occupational profile of the study participants: All PHC professionals who participated in this study are nurses that ranged in age from 25 to 50 years, with the majority (five) in the age range between 31 and 40 years. As for the time of training in the health area, most of them (six) had more than 10 years of experience in the field at the time of this study. Regarding the time working with the Family Health Strategies (FHS), six had been working with these strategies for more than six years. As for the PWDs, their ages ranged from 23 to 77 years, six of them being 60 years old or older, an age group considered elderly in Brazil. As for gender, most of them are men (10) and as for education, all of them had incomplete elementary school educations. Regarding the professional trajectory, many of PWDs pointed out that they started working between the ages of five and 15. They emphasized that during childhood they carried out domestic activities, helped in agricultural work, thus, substituting for an adult worker.

Work-related experiences of PWDs in rural areas: This thematic category brings data about the history of work-related accidents, difficulties regarding the disabilities generated by the work accident, current work situation, and history of diseases.

Regarding the history of work-related accidents, PWDs highlighted precarious working conditions in the rural environment and the accidents they suffered that were less severe included: falls, cuts with saws, and accidents with large animals. Most do not use Personal Protective Equipment (PPE). However, some use sunscreen, raincoats, and gloves for protection. They also mentioned not picking the wet tobacco leaves due to fear of nicotine intoxication, paying attention to the prevention of the Green TobaccoSickness: 'Only raincoat and gloves when picking and tying the tobacco. To apply poison, no PPE at all' (PWD 8), '[...] I don't harvest wet tobacco, we get sick [...]' (PWD 9). As for the disabilities generated by accidents at work, most PWDs reported amputation of fingers; physical and motor limitations due to fractures involving knee, collarbone, skull, and shoulder; neurological after-effects; amputation of lower limb and paraplegia. In light of these conditions, all PWDs reported difficulties in performing fieldwork, especially limitations related to lack of motor ability, strength, sensitivity, and fine motor skills: '[...] no longer have strength, strength in the hand [...] 50% less strength, I have pain in the fingertips that I lost. Difficulty picking tobacco in the field' (PWD 10). As for the current work realities, 12 PWDs work, and the others report not developing occupational activity due to motor, physical, or intellectual after-effects, resulting from the work accident. PWDs who do not own farms report few job opportunities in rural areas, being in the informal market, with intermittent work, being paid per day, during harvest periods. They report suffering discrimination due to physical and/or motor limitations that hinder their agility in production. PWD farm owners live with their children and develop their activities by helping in the tobacco fields, in the cultivation of produce in vegetable gardens, and in raising animals for their own consumption. PWDs who live alone and have no help from family members mentioned difficulties in maintaining the property due to disability and advanced age, as well as the lack of economic conditions to hire labor. Economically, most PWDs are not retired and receive social security disability benefits, which are not enough to support them economically:

If I work hard I can't stand the pain in my back, neck. My wrist also hurts a lot, you know, it feels like it's open, it burns, it hurts a lot when I do anything [...] I can't do it anymore, the property gives a lot of work and I can't do everything. (PWD 13). Given this, some PWDs over 60 years of age mentioned the desire to live in an urban area. However, there are difficulties for the commercialization of the properties due to the distance and the precarious access conditions. The intention to live in an urban area is also due to the access to health services, which isa condition that they do not have in the rural area. PWDs understand that working in rural areas does not offer many alternatives to prevent work-related injuries and most consider the accident they suffered as unavoidable. They justify staying in rural work due to their low education level. Regarding the history of work-related diseases, complaints such as musculoskeletal pain, mental suffering, and cancer cases were prevalent. Many PWDs reported feeling pain, besides those related to the work accident, in the upper limbs and spine, suggestive of work-related musculoskeletal disease. As for mental suffering, most mentioned feeling depression, a lack of energy, stress, and anxiety. Most of the individuals interviewed use antidepressants and/or anxiolytics and do not usually consume alcoholic beverages. Histories of skin cancer were mentioned by some PWDs, which led them to report that they usually use sunscreen, made available by the rural workers union.

Perceptions of PHC professionals about the work realities and health actions developed in rural areas: This thematic category presents the PHC professionals' recognition of the problems and occupational risks in rural areas and the health assistance developed for workers with disabilities. The perceptions of the health professionals are in line with the statements made by PWDs regarding the strategies adopted by sick workers to remain in rural work. The professionals highlighted that most people make continuous use of medication to treat depression and control pain. Help from family and support from friends in the community are common practices in this environment: 'Most of the sick workers live with pain and the continuous use of painkillers to keep working' (PS4).

Community living is a perceived strategy among sick workers. The family gets together, neighbors help, exchange workdays, exchange products and food of their own production for consumption. The children and spouses take over the work and get on with life (PS7). Health professionals recognize the existence of PWD as a result of work-related accidents or diseases in rural areas, reporting the existence of cases in the areas covered by the FHSs where they work. Some professionals develop assistance aimed at preventing new health problems with individual orientations about the importance of the use of PPE, care with the use of pesticides, and the times of day to avoid sun exposure. They emphasized that the orientations occur during the consultations at the health units and home visits. As for the health assistance or specific programs for people who became disabled due to their work, either in the FHS or in another sector of the municipality, most of the participants answered that there were none. Regarding the municipal competencies on the implementation and development of the National Policy on Worker's Health, six participants said they are carried out, still in an incipient manner.

As for the characteristics of the rural setting as a generator of work-related health problems, the professionals reported that it is exhausting, with many hours of exposure to several occupational risks, such as chemical risks, due to the use of pesticides; physical risks, due to the exposure to cold, heat, and humidity; accident risks, due to the use of precarious and unprotected machinery and tools, and the lack of PPE: 'Many accidents occur when cutting firewood with chainsaws, with tractors, and other lighter accidents such as cuts and fractures of fingers and toes' (HP3). Yes, working in the rural environment can lead to many accidents, with agricultural inputs or even accidents with animals. Our countryside reality brings countless accidents with definitive disabilities with animals (oxen stepping on the worker's feet, causing serious trauma) and falling from tobacco curing barns (a strong crop in the region) among others (HP6). As for the visibility and frequency of work-related accidents, the professionals emphasize that they occur once or twice a week among the population of farmers. They become evident when people seek assistance in the health unit, especially during the period of greatest work intensity, at the stage of planting and harvesting tobacco.

DISCUSSION

The municipalities that took part in this research belong to Health Region 28 of Rio Grande do Sul (RS), Brazil. It is important to highlight that the regionalization of health, in the context of the construction of the Unified Health System (SUS), is linked to greater socio-spatial participation, in addition to assisting in the organization, planning,and management of health assistance and services, according to the social, political, and economic characteristics of local and regional spaces. In this sense, regionalization is a reference in the definition of priorities, the use of available resources, the encouragement of sharing of responsibilities among governments, and the participation of society. The "health regions" meet the decree of the Ministry of Health (no. 7,508, of June 28, 2011), which regulated Law no. 8.080, of September 19, 1990, to establish the organization of the SUS, health planning, health care, and inter-federative articulation. In this decree, the "health region" was defined as "a continuous geographic space, delimited by cultural, economic, and social identities and communication and infrastructure networks, with the purpose of integrating the organization, planning, and execution of health assistance and services. From this historical process of regionalization of health policies, 30 Health Regions were defined in Rio Grande do Sul (Brazil Government 2011). From the point of view of its economic formation in the region, since the second half of the 19th century, tobacco production started to emerge as the main economic activity, occupying differentiated importance in the small agricultural production of German immigrants, placing itself as a commercial product that added to the products which provided subsistence needs (Stülp 2001; Etges 1991; Vogt 1997).Since then, tobacco productionhas had significant participation in the development dynamics of the region, increasingly articulating agricultural activities with locally organized industrial activities.

With the consolidation of the industrial production linked to tobacco, migrations occurred, fundamentally, to meet the labor force needs of the industries. Also, these migrations were motivated by the expectation of facing the conflicts present in the development of small farms in the region (Silveira and Hermann 2001; Etges 1991).
The municipalities that took part in this research have as their main activity the agricultural production, performed predominantly by family labor, under working and production conditions that are often harmful to the workers' health. These conditions are characterized by the intensive use of pesticides in tobacco production and the significant presence of children and adolescents in agricultural activities performed on rural properties. As Ascari, Scheid, and Kessler (2012) point out, government authorities in Brazil recognize that tobacco farming exposes workers to various risks due to the high application of pesticides needed to combat pests, weeds,and diseases caused by fungi that impede the growth of tobacco, and can harm the harvest. Pesticides used in tobacco farming are highly harmful to human health because they cause many cases of poisoning and deaths. This intoxication can occur by the absorption of nicotine through the skin, through contact with the green and moist tobacco leaves, causing "green tobacco sickness." The symptoms of this disease are nausea, vomiting, weakness, headache, and dizziness, and possibly abdominal cramps" (Ascari, Scheid, and Kessler 2012, 43). Different studies conducted on the relationship between the health of rural workers and tobacco production have indicated how frequently these workers are subject to work-related diseases, because of the risks and occupational illness "due to direct contact with pesticides and tobacco leaves" which is part of their daily work (Ascari, Scheid, and Kessler 2012). Since this is work takes place in the family environment, in a sociocultural context that values a work ethic, the meaning of work for children and adolescents becomes relative(working, during school hours or not, directly in tobacco production, in working conditions that expose children to different types of risks, is not the same thing as occupying children and adolescents with family unit activities in a non-compulsory manner that are complementary and do not compromise their development) (IDEM, Ibid.) The illegality of this type of work does not receive due attention. It is not too much to record that the Child and Adolescent Statute (ECA), based on the 1988 Federal Constitution (Article 7, XXXIII), prohibits night, dangerous, and unhealthy work for those under 18 years of age and any work for those under 16 years of age, except as an apprentice from the age of 14) (ECA 2019).

Both the exposure of farmers to the adversities of an agricultural production that intensively uses pesticide products and the presence of children and adolescents in tobacco agricultural production are illustrative of the contradictions, inconsistencies, conflicts, and challenges that arise when thinking about the health of workers in a region where agricultural activities are of great importance. These factors make it a challenge to build public policies for the health of workers that can achieve working and living conditions that have a type of organization that is not necessarily achieved by public control. In the specific case of the Region, the almost insignificant number of the formal registration of workers in different municipalities is certainly an important indicator of this historical situation. As far as health care is concerned, the municipalities have full Family Health Strategy (FHS) coverage, where primary health care is available. According to the inclusion criteria for participation in the research, nurses were invited, professionals with the longest time working with the Family Health Strategies belonging to the municipalities that took part in the research. Oliveira et.al. (2020) emphasize that health professionals with more experience working in FHS and living with the community recognize the characteristics of the rural setting, the occupational risks, and the pathologies related to this environment. Oliveira et.al. (2019) describe that health professionals working in primary care in rural areas, especially nurses, face daily challenges such as lack of infrastructure. However, despite these challenges, they make their work a place to exchange knowledge, learn, and grow through their bond with the population. The professional nurse develops care, educational, administrative, and coordinative assistance.

Another typical characteristic of rural areas, which is in line with this study, is related to the low education of PWDs and their history of dealing with daily tasks starting from childhood. Schooling in rural areas is an important issue because having a low level of education has a direct influence on life and daily tasks, such as difficulty in interpreting the labels of pesticides and other chemicals used in farming. Besides the difficult access to schools, many people attend only the elementary grades to dedicate more time to domestic activities and help their families. Therefore, most farmers report starting their work activities in childhood and remain active in family farming throughout adulthood (Santos and Lopes 2016). The precarious working conditions of PWDs in rural areas, the occupational risks to which they are exposed, the non-use of PPE, mainly due to the lack of such equipment (Ximenes *et al*. 2016; Zavarizzi *et al*. 2019), the use of precarious tools, and machines, exposure to pesticides, the requirement of great physical effort, incorrect posture, and long and exhausting working hours can trigger numerous work-related diseases, accidents, and deaths (Martins and Ferreira 2016). Thus, it is true that the rural population informally performs labor activities in unfavorable housing and work contexts, therefore experiencing a lack of social protection (Ximenes *et al*. 2016; Zavarizzi *et al*. 2019).

Among Brazilian workers, occupational accidents are considered the largest health injury (Cordeiro *et al*. 2017). Predominant in professional and institutional settings, occupational accidents are commonly related to unsafe behaviors, resulting in victim-blaming and the trivialization of accidents (Jackson Filho *et al*. 2019). Since these injuries are so common, it is reflected in the health of the workers in the mediation for recurrence of cases and the sickness of the subjects, as it prevents the creation of social strategies for the prevention of cases (Cordeiro *et al*. 2017; Butierres and Mendes 2016). It is perceived in the reported experiences that all PWDs interviewed have suffered, in addition to child labor, minor work accidents, which are common, even if they are in a condition of disability as a result of work accidents in rural areas. Concerning occupational activity, according to the research carried out, PWDs living in rural areas need to continue developing their work functions, even with difficulties arising from disability. However, PWDs that have formal work present greater difficulties in being hired, due to the limited skills that are often necessary for the development of work processes. In the economic scope, although many PWDs are considered incapable (disabled) by the National Institute of Social Security (INSS), and receive aid from this social security agency, it is still necessary to complement income through informal work (Nogueira *et al*. 2016; Miranda 2018). The trajectory of the economic instability of PWDs is ever-present limiting the life alternatives and future prospects of this population, making PWDs vulnerable (Lopes 2015). The aging process is also a topic of discussion, to the extent that living and aging in the city and rural areas have unique aspects. When addressing these realities, we begin to understand that there are historical, social, and cultural particularities that make up a specific reality (Alcântara, 2016). In rural areas, two dimensions are widely discussed in the literature: the geographical barriers such as the inadequacy and/or shortage of transportation and the long distances to be traveled, limiting the right to access, especially to essential services such as health care (Ursine, Pereira, and Carneiro 2018). When addressing the context experienced by PWDs who reside in this setting and considering that they have several health demands, in addition to the geographical barriers mentioned, such people still face financial, informational, and the lack of structural accessibility of health services (Zeni *et al*. 2020b; Dassah *et al*. 2018). Authors such as Dassah *et al*. (2018) infer that these barriers reflect negatively on health and increase the disparities experienced by the rural PWD population and the general population. The present study provides evidence that the choice to do rural work is also due to low education. In this sense, education policies aim to improve people's schooling, and it is assumed that the higher the educational level, the greater the chances of the individual being inserted into the labor market. However, a study conducted in Brazil in 2020, which analyzed the school and work trajectory of persons with disabilities, showed that even with a higher educational level, PWDs still have less income if compared to those without disabilities and no education (Pontes, Salvini, and Silva 2020). There is a need to pay attention to particularities that involve the inclusion process and the educational dimension, considered fundamental to the process of autonomy of different subjects, which prepares people for work and "to think and act in a prejudiced and excluding society" (MendonçaNeto *et al*. 2018, 116). Another challenge is the inclusion that must be beyond the biomedical model of disability "to give crutches and prostheses, it is not enough to make a seat available for people with disabilities on public transport or guarantee a desk in a classroom" (117). In this sense, the importance of breaking with "attitudinal barriers in relation to PWDs [...] above all, ways to eliminate the too many mechanisms of social subjection experienced by PWDs" is emphasized (118).Education is essential and one of the bases for inclusion, not only for people with disabilities but for the population in general. In the field of health, specifically, the implications of low education are reflected in poor knowledge about the importance of health promotion and prevention of diseases, which interferes negatively in self-care and may lead to illness for individuals (Nogueira *et al*. 2016; Bamu and Hove 2017). Regarding the history of work-related diseases, PWDs mentioned cases of pathologies involving physical and mental disorders and sun exposure. Concerning musculoskeletal disorders, resulting from conditions of intense inflammation or degeneration of tendons, nerves, ligaments, muscles, and periarticular structures of the upper limbs and neck, it is interesting to point out that they do not originate from sudden or systemic injuries, but from low-intensity trauma over long periods to the mentioned structures. This disease has a multifactorial origin and there is consistent evidence on the contribution of work activities in the development of the disorders (Assunção, and Abreu 2017). In the context of rural workers, musculoskeletal diseases have a strong impact, ranging from living with permanent, intense, and daily pain to the inability to perform their activities, implications that are not restricted to the physical field, but also to the psychological and emotional health of workers (Franceschina and Beltrame 2017). Mental suffering, experienced in rural areas takes on certain singularities, which can be related, in general, to life contexts. Generally, suffering is related to low education, work and financial difficulties, and greater dependence on family (Neto and Dimenstein 2017a). Another disease mentioned by the workers was skin cancer, a disease with universal distribution. Generally, this cancer presents itself in light-skinned people, due to excessive and intermittent sun exposure. Treating the southern region of Brazil, we found the highest incidence of melanoma for men and women. Rural workers are among the most exposed occupations, where the use of personal protective equipment is inadequate, such as the use of hats without brims (caps), instead of hats with brims. Studies point out that encouraging the proper use of this equipment as well as the use of sunscreen is related to strengthening knowledge of the disease and facilitates positive changes in the behavior of rural workers (Cezar-Vaz *et al*. 2015). The health professional in this research highlighted that the rural population usually practices mutual help, occurring through community work in favor of a resident in need. In these situations, neighbors and friends get together to develop occupational activities, such as, for example, in some stages of the tobacco growing process. Likewise, the subject reciprocates the assistance with activities he or she can perform, thus becoming an exchange of mutual service (Neto and Dimenstein 2017b).

Concerning health care, the precariousness of health care for PWDs in rural areas is noted, due to numerous aspects, such as the difficulty in accessing health services because of not having adequate transportation and the low demand for health professionals. In addition, the precarious physical structure of health services and the limited available hours of Family Health Strategies are common in rural areas (Silva *et al*. 2021). The programs, assistance, and policies aimed at the rural environment and PWDs are often not carried out as recommended by the Brazilian legislation, among other causes, due to the generalized training of professionals, who do not identify the particularities of the health of the rural population. Some health services are performed by Community Health Agents during home visits, where they provide orientation on self-care, exemplified by the correct use of PPE (Silva *et al*. 2021).

There are several particularities experienced by persons with disabilities who live in the countryside. When such aspects are disregarded, access to care for this population becomes limited and there is a risk that their needs will not be fully met (Zeni *et al*. 2020a). In developing countries, especially in rural areas, the family is still seen as primarily responsible for all aspects of care and support. This fact can often be reinforced by legislation in these countries (Gupta, Witte, and Meershoek 2020). These circumstances end up contributing to the non-recognition of the rights of PWDs and reinforce their social invisibility, which can lead to less specific health assistance for this population. The health care and rehabilitation of persons with disabilities are provided for by the Unified Health System (SUS). However, the assistance to this population is predominantly focused on the care of pathologies, which interferes negatively in the completeness of care (Rocha and Kretzer 2009). In Brazil, the National Health Policy for People with Disabilities (PNSPcD), approved in 2002, provides the details for the actions carried out by SUS and in the most diverse governmental instances. The central goal of this policy is the rehabilitation of individuals with disabilities in their functional capacity and human performance, thus contributing to inclusion (Brazil Government 2010). Furthermore, global policy documents such as Sustainable Development Goals recognize the need to support access to quality health care for persons with disabilities. Thus, ensuring equitable access to health care for this population is a priority for many health systems (Dassah *et al*. 2019). Regarding the types of assistance developed by health services in Brazil, Primary Care plays an essential role in the implementation of the National Policy for Workers' Health (PNSTT). The Family Health Strategy (FHS) teams know the context of the users' lives that sometimes present forms of illness related to work, considered a determining factor in the health-disease process of individuals. In this sense, the characteristics of the work process and the attributions of PHC professionals show responsibilities for the health care of workers, thus qualifying health assistance (Brazil Government 2018).

Acknowledgments

This research was developed at the Graduate Program in Health Promotion of the University of Santa Cruz do Sul (UNISC) for post-doctoral purposes. It had the support of the Study and Research Group on Health (GEPS) of UNISC, articulating with other research papers involving this research theme; 13th Regional Health Coordinator; Regional Reference Center on Worker Health (CEREST) Vales and with the Labor Union of Family Farmers of the municipalities.

REFERENCES

Alcântara, A. 2016. “Envelhecer no contexto rural: a vida depois do aposento.” In Políticas Nacional do Idoso: velhas e novas questões, edited by A. Alcântara, A.A Camarano, and K.C. Giacomin. 323-342. Rio de Janeiro: IPEA.

Ascari, R. A., M. Cheid, and M. Kessler. 2012. “Fumicultura e a utilização de agrotóxicos: riscos e proteção da saúde.” *Revista Contexto e Saúde* 12 (23): 41-50. Advance online publication. doi: 10.21527/2176-7114.2012.23.41-50.

Assunção, A. A., and M. N. S. Abreu. 2017. “Fatores associados a distúrbios osteomusculares relacionados ao trabalho autorreferidos em adultos brasileiros.” *Revista de Saúde Pública* 51 (Sup. 1): 1-12. Advance online publication. doi: 10.1590/S1518-8787.2017051000282.

Bamu, B. N., and G. V. Hove. 2017. “Community perceptions of people with disabilities in the North West region of Cameroon: what is the impact on their access to services?.” Disability & Society 32 (1): 56-68. Advance online publication. doi: 10.1080/09687599.2016.1265915.

Brazil Government. 2010. “Política Nacional de Saúde da Pessoa com Deficiência.” Federal Register of Legislation. Acessed 2 Jul 2021. https://bvsms.saude.gov.br/bvs/publicacoes/politica_nacional_pessoa_com_deficiencia.pdf

Brazil Government. 2011. “Decreto nº 7.508.” Federal Register of Legislation. Acessed 2 Jul 2021. http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2011/decreto/D7508.htm.

Brazil Government. 2012. “Resolução no 466.” Federal Register of Legislation. Acessed 2 Jul 2021. http://bvsms.saude.gov.br/bvs/saudelegis/cns/2013/res0466_12_12_2012.html.

Brazil Government. 2018. “Saúde do trabalhador e da trabalhadora.” Ministério da Saúde. Acessed 19 Jun 2021. http://renastonline.ensp.fiocruz.br/recursos/caderno-atencao-basica-41-saude-trabalhador-trabalhadora

Butierres, M.C, and J. M. R. Mendes. 2016. “A discriminação de vítimas de acidente do trabalho ou de doença ocupacional: uma situação de invisibilidade social potencializada.” Sociedade em Debate 22 (1): 237-260. Advance online publication. url: https://rle.ucpel.tche.br/rsd/article/view/1337.

Cervi, M. L. 2015. “Os acidentes do trabalho e as doenças ocupacionais no meio ambiente rural e seus impactos judiciais trabalhistas.” PhD diss., University of Santa Maria. https://repositorio.ufsm.br/handle/1/3627.

Cezar-Vaz, M. R., C. A. Bonow, D. R. Piexak, S. Kowalczyk, J. C. Vaz, and A. M. Borges. 2015. “Câncer de pele em trabalhadores rurais: conhecimento e intervenção de enfermagem.” *Revista da Escola de Enfermagem da USP* 49 (4): 564-571. Advance online publication. doi: 10.1590/S0080-623420150000400005.

Cordeiro, R., V. G. Luz, E. Z. Hennington, A. C. A. Martins, and L. F. Tófoli. 2017. “A violência urbana é a maior causa de acidente de trabalho fatal no Brasil.” *Revista de Saúde Pública* 51: 123-134. Advance online publication. doi: 10.11606/S1518-8787.2017051000296.

Dassah, E., H. Aldersey, M. A. McColl, and C. Davison. 2018. “Factors affecting access to primary health care services for persons with disabilities in rural areas: a “best-fit” framework synthesis.” *Global health research and policy* 3 (1): 1-13. Advance online publication. doi: 10.1186/s41256-018-0091-x.

Dassah, E., H. Aldersey, M. A. McColl, and C. Davison. 2019. “Healthcare providers’ perspectives of providing primary healthcare services to persons with physical disabilities in rural Ghana.” *Primary Health Care Research & Development* 20 (e108): 1-8. Advance online publication. doi: 10.1017/S1463423619000495.

ECA. Estatuto da Criança e do Adolescente. 2019. https://www.gov.br/mdh/pt-br/centrais-de-conteudo/crianca-e-adolescente/estatuto-da-crianca-e-do-adolescente-versao-2019.pdf (Lei nº 8.069, de 13 de julho de 1990; accessed July 5, 2021)

Etges, V. E. 1991. Sujeição e resistência: os camponeses gaúchos e a indústria do fumo. Santa Cruz do Sul: Livraria e Editora da FISC.

Fernandes, F. 1987. A revolução burguesa no Brasil: ensaios de interpretação sociológica. Rio de Janeiro: Guanabara.

Franceschina, A. P., and V. Beltrame. 2017. “Impacto das doenças osteomusculares na saúde do trabalhador rural.” *Anais da Semana Acadêmica e Mostra Científica de Enfermagem*, no. 16: 1-15. Advance online publication. url: https://portalperiodicos.unoesc.edu.br/anaissamcenf/article/view/13438.

Gomez, C. M., L. C. F. Vasconcellos, and J. M. H. Machado. 2018. "Saúde do trabalhador: aspectos históricos, avanços e desafios no Sistema Único de Saúde." *Ciência & Saúde Coletiva* 23(6): 1963-1970. Advance online publication. doi: 10.1590/1413-81232018236.04922018.

Gupta, S., L. P. de Witte, and A. Meershoek. 2020. "Dimensions of invisibility: insights into the daily realities of persons with disabilities living in rural communities in India," *Disability & Society*. Advance online publication. doi: 10.1080/09687599.2020.1788509.

IBGE. Instituto Brasileiro de Geografia e Estatística. Censo Demográfico 2010. https://biblioteca.ibge.gov.br/index.php/biblioteca-catalogo?view=detalhes&id=794 (características gerais da população, religião e pessoas com deficiência; accessed July 2, 2021).

IBGE. Instituto Brasileiro de Geografia e Estatística. 2016. "PNS 2013: 12,4% das pessoas que sofreram acidente de trabalho tiveram sequelas." Agência de Notícias, June 30. https://agenciadenoticias.ibge.gov.br/agencia-sala-de-imprensa/2013-agencia-de-noticias/releases/15170-pns-2013-12-4-das-pessoas-que-sofreram-acidente-de-trabalho-tiveram-sequelas

IBGE. Instituto Brasileiro de Geografia e Estatística. Censo Agropecuário 2017. https://censos.ibge.gov.br/agro/2017/ (notificação de acidentes de trabalho; accessed July 2, 2021).

Jackson Filho, J. M., E. G. Garcia, H. G. David, S. R. C. Duracenko, and A. P. Simonelli. 2019. "Acidentes de trabalho e atuação do Centro de Referência em Saúde do Trabalhador nas páginas do Jornal de Piracicaba entre 2007 e 2014." Interface-Comunicação, Saúde, Educação 23 (e18065): 1-16. Advance online publication. doi: 10.1590/Interface.180659.

Lopes, M. J. M. 2015. "Violência contra mulheres em áreas rurais sob o olhar da saúde." In O Rural e a Saúde: Compartilhando Teoria e Método, edited by E. T. Gerhardt, and M. J. M. Lopes. 77-85. Porto Alegre: UFRGS.

Martins, A. J., and N. S. Ferreira. 2016. "Ergonomia no trabalho rural." *Revista Atualiza Saúde* 2 (2): 125-134. Advance online publication. url: http://atualizarevista.com.br/wp-content/uploads/2015/07/A-ergonomia-no-trabalho-rural-v.2-n.2.pdf.

Mendonça Neto, W. L., A. C. D. Marques, and R. E. Borges. 2018. "Desafios da inclusão da pessoa com deficiência: diferença, desigualdade e espacialidade da deficiência em Goiânia." In Uma ponte ao mundo: cartografias existenciais da pessoa com deficiência e o trabalho, edited by E. F. Chaveiro and L. C. F. Vasconcellos. 113-138. Goiânia: Kelps.

Minayo, M. C. S. 2014. O desafio do conhecimento: pesquisa qualitativa em saúde. São Paulo-Rio de Janeiro: HUCITEC.

Miranda, C. B. 2018. "Aspects of the current workers' rehabilitation scenario in Brazil: strides and setbacks." *Cadernos de Saúde Pública* 34 (8): 1-14. Advance online publication. doi: 10.1590/0102-311x00218717.

Neto, M. C. C., and M. Dimenstein. 2017a. "Saúde Mental em Contextos Rurais: o Trabalho Psicossocial em Análise." *Psicologia: Ciência e Profissão* 37 (2): 461-474. Advance online publication. doi: 10.1590/1982-3703002542016.

Neto, M. C. C., and M. Dimenstein. 2017b. "Cuidado Psicossocial em Saúde Mental em Contextos Rurais." Temas em Psicologia 25 (4): 1653-1664. Advance online publication. doi: 10.9788/TP2017.4-09Pt.

Neves-Silva, P., F. G. Prais, and A. M. Silveira. 2015. "Inclusão da pessoa com deficiência no mercado de trabalho em Belo Horizonte, Brasil: cenário e perspectiva." *Ciência e Saúde Coletiva* 20 (8): 2549-2558. Advance online publication. doi: 10.1590/1413-81232015208.17802014.

Nogueira, G. C., S. D. Schoeller, F. R. S. Ramos, M. I. Padilha, L. C. F. Brehmer, and A. M. F. B. Marques. 2016. "Perfil das pessoas com deficiência física e Políticas Públicas: a distância entre intenções e gestos." *Revista Ciência e Saúde Coletiva* 21 (10): 3131-3142. Advance online publication. doi: 10.1590/1413-812320152110.17622016.

Oliveira, A. R., Y. G. Sousa, I. V. A. Diniz, S. M. Medeiros, C. Martiniano, and, M. Alves. 2019. "The daily routine of nurses in rural areas in the Family Health Strategy." *Revista Brasileira Enfermagem* 72 (4): 970-977. Advance online publication. doi: 10.1590/0034-7167-2018-0243.

Oliveira, A. R., Y. G. Sousa, D. M. Silva, J. P. Alves, I. V. A. Diniz, S. M. Medeiros, C. S. Martiniano, and M. Alves. 2020. "Primary Health Care in the rural context: The nurses' view." *Revista Gaúcha Enfermagem* 41 (e20190328): 1-8. Advance online publication. doi: 10.1590/1983-1447.2020.20190328.

Pontes, R. P., R. R. Salvini, and M. M. C. Silva. 2020. "Educação especial e inclusão social na trajetória escolar e laboral para pessoas com deficiência no Brasil." Pesquisa e planejamento econômico 50 (1): 31-66. Advance online publication. url: https://ppe.ipea.gov.br/index.php/ppe/article/view/2083.

Rocha, E. F., and M. R. Kretzer. 2009. "Ações de reabilitação de pessoas com deficiência na estratégia da saúde da família da Fundação Zerbini e Secretaria Municipal de Saúde de São Paulo - Região Sudeste – Sapopemba/Vila Prudente - período 2000/2006." *Revista de Terapia Ocupacional da Universidade de São Paulo* 20 (1): 59-67. Advance online publication. doi: 10.11606/issn.2238-6149.v20i1p59-67.

Rodrigues, S. M., M. Aoki, and F. C. Oliver. 2015. "Diagnóstico situacional de pessoas com deficiência acompanhadas em terapia ocupacional em uma unidade básica de saúde." *Caderno de Terapia Ocupacional da UFSCar* 23 (4): 781-794. Advance online publication. doi: 10.4322/0104-4931.ctoAO0713.

Santos, G. S. H., and R. E. Lopes. 2016. "A (in) elegibilidade de trabalhadores encaminhados ao Programa de Reabilitação Profissional do INSS." *Revista Katálysis* 18 (2): 151-161. Advance online publication. doi: 10.1590/1414-49802015180200002.

Santos, J. C., and M. N. Carvalho-Freitas. 2018a. "Sentidos do trabalho para pessoas com deficiência adquirida." *Psicologia & Sociedade* 30 (e160054): 1-11. Advance online publication. doi: 10.1590/1807-0310/2018v30160054.

Santos, J. C., and M. N. Carvalho-Freitas. 2018b. "Reinserção profissional: o trabalho após a aquisição de uma deficiência." *Arquivos Brasileiros de Psicologia* 70 (3): 184-197. Advance online publication. url: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1809-52672018000300013.

Santos, C. R. and R. E. Borges. 2018. "Inclusão de profissionais com deficiência no mercado de trabalho: entre a pinguela e aponte em construção." In Uma ponte ao mundo: cartografias existenciais da pessoa com deficiência e o trabalho, edited by E. F. Chaveiro and L. C. F. Vasconcellos. 97-112. Goiânia: Kelps.

Silva, E. S. 2017. "A saúde do campo e o processo de trabalho da equipe de saúde da família recife." PhD diss., Fundação Oswaldo Cruz.

Silva, B. N., V. K. G. Araújo, R. S. Felix, D. G. C. Rebouças, S. Y. B. Silva, and E. S. G. Pinto. 2021. "Estado da arte da produção stricto sensu da enfermagem brasileira sobre saúde da população rural." *Escola Anna Nery* 25 (4): 1-10. Advance online publication. doi: 10.1590/2177-9465-EAN-2020-0487.

Silva, A. S. and A. I. A. Fonseca. 2020. "O espaço rural: percepção dos riscos projetos de irrigação Gorutuba/Lagoa Grande e Jaíba-MG." *Revista Geografia* 9 (17): 63-76. Advance online publication. doi: 10.20873/rtg.v9n17p63-76.

Silveira, R. L. L. and E. Hermann. 2001. "As cidades e a urbanização do Vale do Rio Pardo." In Vale do Rio Pardo: (re) conhecendo a região, edited by Vogt, O. P. and R. L. Silveira, 217-257. Santa Cruz do Sul: EDUNISC.

Stülp, V. J. 2001. "O setor primário da região do Vale do Rio Pardo." In Vale do Rio Pardo: (re) conhecendo a região, edited by Vogt, O. P. and R. L. Silveira, 167-215. Santa Cruz do Sul: EDUNISC.

Ursine, B. L., E. L. Pereira, and F. F Carneiro. 2018. "Saúde da pessoa com deficiência que vive no campo: o que dizem os trabalhadores da Atenção Básica?." *Interface-Comunicação, Saúde, Educação* 22 (64): 109-20. Advance online publication. doi: 10.1590/2177-9465-EAN-2020-0487.

Vogt, O. P. 1997. A produção de fumo em Santa Cruz do Sul–RS (1849 – 1993). Santa Cruz do Sul: EDUNISC.

Wellichan, D. S. P., M. G. F. Dos Santos, and C. C. T. S. Lino. 2019. "Deficiência adquirida por acidente de trabalho: a superação física, pessoal e profissional após uma amputação." *Ciência em Movimento* 21 (42): 17-30. Advance online publication. doi: 10.15602/1983-9480/cm.v21n42p17-30.

Ximenes Neto, F. R. G., D. O. Aurélio, Dos Santos F. D., V. E. S Ferreira, R. A. R. Pereira, and M. S. C. Linhares. 2016. "Perfil Sociodemográfico e Trabalhista dos Trabalhadores Rurais Vítimas de Acidente no Semiárido Cearense." *Revista Enfermagem* 7 (1): 56-60. Advance online publication. doi: 10.21675/2357-707X.2016.v7.n1.668.

Zavarizzi, C. P. J. M. M. Simas, L. F. Dos Santos, and M. C. B. Alencar. 2019. "Contexto rural e a reabilitação profissional em uma região do Vale do Ribeira." *Revista Saúde debate* 43 (123): 1057-1069. Advance online publication. doi: 10.1590/0103-1104201912306.

Zeni, D., M. C. Da Costa, E. B. Da Silva, F. Honnef, J. Airboit, and I. C. S Colomé. 2020a. "Atenção à saúde de pessoas com deficiência em cenário rural sob perspectiva dos agentes comunitários." *Revista Brasileira de Enfermagem* 73 (6): 1-7. Advance online publication. doi: 10.1590/0034-7167-2019-0204.

Zeni, D, M. C. Costa, F.A. Rockemback, D. T. Schenkel, J. Arboit, F. Honnef. 2020b. "Pessoas com deficiência no cenário rural: concepção dos Agentes Comunitários de Saúde." *Revista de Enfermagem da UFSM* 10(e62): 1-18. Advance online publication. doi: https://doi.org/10.5902/2179769239660.

****