

# The elderly, work and health present and future challenges in the aging of rural family population in the south of Brazil

## Abstract

This paper has the objective of discussing some aspects of work and health in people 60 years of age or more residing in rural areas in the south of Brazil, based on literature review. In our work, we have observed that the life conditions of those individuals go through different situations related to the nature of rural work, their physical situation of health and the access to quality public resources. Those are the challenges we must consider when reflecting upon the social and political issues faced by the rural elderly population.

**Keywords:** aging, health of the elderly, rural health, occupational health, occupational exposure

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## Introduction

Aging is a dynamic process, causing progressive modifications in many different systems,<sup>1</sup> promoting morphological, functional, biochemical, and accidental changes, which cause a reduction in the capability of homeostatic adaptation to situations of functional overload, rendering the organism more susceptible to both intrinsic and extrinsic aggressions.<sup>2,3,4</sup> An increasingly old population poses new challenges to the organization model and to the management in health care, this way demanding special attention, since there is higher chance and vulnerability to situations of chronic and potentially disabling diseases. In the south of Brazil, this condition already corresponds to 78.5% of the causes of death in the general population.<sup>5</sup> On the other hand, this situation allows increasing expenses in health assistance, mainly regarding services of high complexity.<sup>6,7</sup> In this part of the country, most of the elderly population is situated in municipalities with less than 10,000 inhabitants, where the main economic activities are those related to farming. Little is known about this population, particularly about the elder rural worker, their health-disease condition and the physical demands of their work.<sup>8,9</sup> This way, the objective of this study is to discuss some of the aspects of work and health of people over 60 years of age residing in rural areas in the south of Brazil, based on literature review.

## Methods

In order to complete this literature review, we consulted websites and official electronic medias (government offices, information departments and college libraries), and scientific journal indices, using the following keywords: elderly, rural population, health of the elderly. The selected materials comprehend research papers with several different approaches, government reports and books, among other materials, developed in the last two decades. Eighteen works that specifically approach issues regarding the working conditions of rural elderly populations were found.

## Results

In rural Brazil, a large portion of the elderly population is still working.<sup>10</sup> Koch<sup>11</sup> on evaluating the workday referred by rural elderly

workers, identified a significant relationship between the average of daily working hours among the age groups ( $p=0,003$ ) with the progress of aging. This difference was observed in the age group of 60 to 69 years (09 hours and 08 minutes) and 70 to 79 years (7 hours and 18 minutes), and 80 years or more (6 hours and 28 minutes). However, no significant differences in the workday among men and women were observed, showing that the spaces where work is performed has little difference between one and the other, except for the use of force in some of the practices.<sup>11</sup> In general, the continuity of work activities performed by elderly in the countryside is evaluated by some researchers as responsible for an improvement in life quality, observed in the physical domain. On the other hand, the researchers suggest that those without physical conditions migrate to the cities due to better access to health services and social support.<sup>12</sup>

Several different factors can influence the motivation of retired individuals to perform work activities. However, it is indisputable that keeping those sorts of activities exerts a positive value in the life of the individual, such as their active participation in the community and the reduction of social isolation.<sup>10</sup> However, the nature of rural work in its multiplicity of tasks demands different types of physical components, such as force, continuous and strenuous activities, exposition to varied chemical or mechanical agents, environmental conditions like heat, cold, noise, mechanical vibrations; machinery and equipment operation; not always using the necessary security items and poor use of individual protection equipment, among other factors, this way making the work conditions unhealthy. This way, despite technological evolution, rural work is considered by the World Health Organization (WHO) as one of the sectors that offers risk to the safety and health of workers, being considered one of the most dangerous labor Categories.<sup>13,14</sup>

Activities related to working directly on the fields and crops present in their characteristics some particularities that deem the worker vulnerable in their health conditions. Few studies have addressed the conditions of work risks to the rural workers, especially those who are 60 years old or more.<sup>15</sup> Martins et al.<sup>16</sup> highlight that agricultural activities demand constant moving in their large areas from the part of the elderly workers, considering the multitude of tasks they

must perform: squats, trunk rotations and flexions, long periods of time standing, intense physical effort, and movement posture, with the upper limbs constantly elevated above shoulder level, besides carrying weight. Which, to a certain extent, potentializes labor risk, mainly regarding accidents.<sup>17</sup>

Another study about occupational vulnerability in rural elderly population<sup>18</sup> identified biological risks related to physical vulnerability, zoonosis and accidents with exposition to varied physical agents, dust, noise, vibrations, temperature changes, ergonomic risks such as inadequate postures, excessive physical effort, repetitive movements, long workdays, diverse kinds of accident and exposure to chemical agents inherent to the use of pesticides.<sup>10</sup>

## Conclusion

Considering the research data and the physiological conditions of the aging process, the individual vulnerability expands to a critical condition in terms of protection of the individuals in their specificities associated to physical and chronological conditions, causing a repercussion that goes beyond individual condition. In this sense, acknowledging work necessities, as well as the susceptibilities entailed in physical practices and abilities in the form of specific policies to protect the elderly health seem to reinforce the idea of a demographic reality in face of the future and present aging of the population.

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## Conflicts of interest

The author declares there is no conflict of interest.

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