Health promotion for young family farmers: perspective for healthy aging

Promoção da saúde do jovem agricultor familiar: perspectiva para um envelhecimento saudável

Promoción de la salud de los jóvenes agricultores familiares: perspectiva para un envejecimiento saludable

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Abstract: Objective: to understand how young farmers take care of their health in the face of vulnerabilities in the work context, thereby unveiling their perspectives for a healthy aging. Method: exploratory, descriptive and qualitative research, performed with ten young people from a town in Rio Grande do Sul, held in the second half of 2018. Data collection took place through semi-structured interviews. Data analysis was based on content analysis. Results: young people promote their health by taking care of food, water intake, climatic adaptations, leisure and maintenance of family relationships. For healthy aging, research participants seek the introduction of technologies focused on relieving physical effort and adhering to preventive practices, showing hereditary concerns and comorbidities. Conclusion: health promotion is held from the care with food, water intake, adaptations to the climate and good family relationships. Physical exercises are not practiced because work activities require intense physical effort.

Descriptors: Health promotion; Young adult; Rural population; Worker's health

Resumo: Objetivo: compreender como jovens agricultores cuidam da saúde diante das vulnerabilidades no contexto de trabalho, desvelando suas perspectivas para o envelhecimento saudável. Método: pesquisa exploratória, descritiva e qualitativa, realizada com dez jovens de um município do Rio Grande do Sul, realizada no segundo semestre de 2018. A coleta dos dados ocorreu por meio de entrevistas semiestruturadas. A análise dos dados foi baseada na análise de

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Resumen: Objetivo: comprender cómo los jóvenes agricultores cuidan su salud ante las vulnerabilidades en el contexto laboral, desvelando sus perspectivas para un envejecimiento saludable. Método: investigación exploratoria, descriptiva y cualitativa, realizada con diez jóvenes de un ayuntamiento de Río Grande do Sul, conducida en el segundo semestre de 2018. La recolección de datos tuvo lugar mediante entrevistas semiestructuradas. El análisis de datos se basó en el análisis de contenido. Resultados: los jóvenes promueven su salud al cuidar los alimentos, la ingesta hídrica, las adaptaciones climáticas, el ocio y el mantenimiento de las relaciones familiares. Para un envejecimiento saludable, los participantes de la investigación buscan la introducción de tecnologías para aliviar el esfuerzo físico y la adherencia a las prácticas preventivas, demostrando preocupaciones hereditarias y comorbilidades. Conclusión: la promoción de la salud se realiza basándose en la atención con alimentos, ingesta hídrica, adaptaciones al clima y buenas relaciones familiares. Los ejercicios físicos no se practican porque las actividades laborales requieren un esfuerzo físico vigoroso.

Descripciones: Promoción de la salud; Adulto joven; Población rural; Salud del trabajador

Introduction

Agricultural activity may be constituted in a dangerous work, depending on the extent we start to observe some risks to which workers are exposed, such as: the use of machines, contact with plants and animals in indoor and outdoor environments, as well as exposure to climatic variations and chemical products.¹ The extensive use of agrochemicals has been a public health problem in underdeveloped countries, especially for those with an economy focused on agrobusiness, for example, Brazil.²

Exposure of rural workers to herbicides, insecticides, fungicides, bactericides, acaricides and fertilizers through direct means, understood as non-use or the inappropriate use of Personal Protective Equipment (PPE), may lead to acute or chronic intoxication.¹ Under such circumstances, the rural producer is directly affected by the effects of chemical substances. Accordingly, he/she needs to be the first to take steps to promote his/her health. The branch of
agriculture depends on the adoption of practices that conserve the environment and the health condition.³

The Brazilian National Health Policy for Populations in the countryside, forests and water, launched in 2011 and revised in 2013, has the objective of improving the health level of the populations for which it is intended. This policy is focused on facilitating the access to health services, promoting the reduction of risks arising from work processes and agricultural technological innovations, in addition to improving the quality of life of those populations.

This policy defines strategic actions determined by the document, namely: access to health services; health promotion and surveillance; continuing education and popular health education; follow-up and evaluation of the access to health actions and services. The actions seek to act on the health determinants and conditions of the populations.⁴

Nevertheless, the life dynamics of young workers in rural areas involves peculiar situations that should be met and taken into account in the organization of health care.⁵ Young people, due to the fact of being considered healthy, generally do not have the necessary health care, except in matters of reproductive health. Accordingly, the health conditions of this group have become a differential that highlights the vulnerability of these young people to the different forms of violence and the increasing incidence of mortality, thereby demonstrating that they mainly stem from external causes.⁶

By extrapolating the notion of risk, we can understand vulnerability as the multi-determination of its conception not strictly conditioned to the lack of access to income, but also to the weaknesses of relational ties and the unequal access to public goods and services.⁷

The fact is that young farmers are, occasionally, left unattended in the field of health due to the preconception that they are healthy. As a result, the consequences emerge silently, since they tend not to use PPE correctly, which contributes to the non-promotion of health in
contemporary times, and without reflecting on the consequences for the future of this
generation of young farmers.

According to the Brazilian law, a person aged between 15 and 29 is considered young. However, a young adult can also be described as being over 18 years old. For this study, we considered young those who were between 18 and 29 years old.

In this perspective, the following questions emerged: how do young farmers take care of their health in the face of the vulnerabilities they experience in their work routine? What are the perspectives of these individuals for a healthy aging?

In light of the foregoing, the objective of this study is to understand how young farmers take care of their health in the face of vulnerabilities in the work context, thereby unveiling their perspectives for a healthy aging.

Method

This is an exploratory and descriptive study, with a qualitative approach. The research took place in a town located in the northwest of the State of Rio Grande do Sul. This town has about 4,830 workers and 2,435 rural properties.

The study was attended by 10 young farmers, who were contacted and identified with the help of the Union of Rural Workers of the city in question. As inclusion criteria in the research, we considered only young people who had tax invoices of rural producer. As exclusion criteria, we disregarded young people who were not exercising the profession of family farmer at that time.

Data collection took place in the second half of 2018, and was carried out through interviews with each participant. Such interviews lasted an average of one hour and followed a script containing semi-structured questions about their sociodemographic profile. The covered
elements were: age; color/race; schooling; religion; branch of activity of family agriculture; how long you have been working and why you are working in family agriculture; with whom you reside; marital status; children; acting in another profession; the exposed occupational risks; the care taken in the face of risks; and on health promotion.

The interviews were carried out at the homes of the participants, at a previously scheduled time. The definition of the place and time of the accomplishment of these interviews aims to guarantee a conversation without interruptions. The interviews started after the signature of the Free and Informed Consent Form, thereby respecting confidentiality and anonymity.

We performed a content analysis based on the collected data.\textsuperscript{10} To that end, after organizing the data, the analysis material was explored, with the organization of coding, choice of units, counting rules and, finally, the definition of two categories, which were defined as follows: Health Promotion and Perspectives with health: how will your aging be held?

This research started after the project was approved by the Research Ethics Committee of the Federal University of Fronteira Sul, Chapecó-SC Campus, which has the Certificate of Presentation for Ethical Appreciation (CAAE) nº 88518418.1.0000.5564, dated June 5\textsuperscript{th}, 2018. As a way of maintaining the anonymity of the participants, in line with Resolution nº 466/2012, we used codenames of fruits (according to the Portuguese language) produced in the city under study, thereby representing one of the family agriculture products.

**Results and discussions**

The research was carried out with 10 young family farmers in the age group from 21 to 28 years old, eight males (80%) and two females (20%), Catholics (100%), white color/race (100%), eight singles (80%) and two married with children (20%). Six of the participants (60%) had completed high school and four (40%) had completed elementary school. Most interviewees
worked in the production of milk (60%), as well as fruits and vegetables (20%), swines/bovines (10%) and agrobusiness (10%).

The length of experience in the field of operation varied from childhood to 3 years prior to the interview. The reasons for working in agriculture were: a taste for the performed activity; family performance in the branch; quality of life; and autonomy in performing actions at work. Two young people (20%) have already had other employment bonds, such as merchant and maid. The others never worked in other fields, either because of lack of interest, because they like the activities that are developed in agriculture, or because they want to continue what the family has already been doing.

Health promotion

The International Conference on Health Promotion, held in Ottawa, Canada, in 1986, established a series of ethical and political principles. These elements defined the fields of action and the concept of health promotion as the process of training the community to act to improve their quality of life and health, which includes it in the control of this process.11

In 2006, the Brazilian Ministry of Health established the National Policy on Health Promotion with the objective of promoting quality of life and reducing vulnerability and health risks related to its determinants. In this policy, mentions are made of working conditions, housing, environment, education, leisure, culture, and access to essential goods and services.12 However, in order to achieve a state of complete physical, mental and social well-being, individuals and groups should be able to identify aspirations, satisfy needs and favorably modify the natural, political and social environment.11 Health is, therefore, a positive concept, which emphasizes social and personal resources, as well as physical capacities.

As we already know, healthy eating is one of the pillars of health promotion,6 and emerged in the speech of some of the participants of this study, who state that:
Mainly in diet, by consuming a lot of fruits and vegetables and here we are able to consume everything fresh, everything we produce [...]. (Uva)

[...] Food, we try to produce everything in the home garden [...]. (Pêssego)

From the 1980s, public policies started to follow the recommendations of the Food and Agriculture Organization (FAO) and of the World Health Organization (WHO), which proposed to improve or expand the quality of life of citizens. Such propositions aim to contribute to the populations so that they have the ability to live independently of the institutions, thereby also having the financial and physical abilities to choose their own meals and food responsibly.¹³

In addition to healthy eating, with a view to promoting health, water intake is important in carrying out physical work. If there is a fluid loss greater than the intake, the farmer may suffer dehydration, besides having productivity, safety and health significantly affected,¹⁴ as highlighted in this research.

[...] I also always take care of the issue of water, because we sweat a lot with the heat, and we have to hydrate our bodies [...]. (Ameixa)

The climate changes also directly affects the health of the farmer,² and this factor was highlighted by young farmers.

[...] when it rains, it’s bad, cold, you have to take more care of ourselves [...]. (Laranja)

[...] Sun protection too, I’ve used sun block. (Maracujá)

The speeches depict the physical agents harmful to health, referring to the exposure to extreme temperatures. The exposure to rain and cold implies the risk of developing colds, flu, sinusitis and bronchitis. Therefore, in order to avoid possible diseases, it is important to use raincoats, rubber boots and clothes that protect the worker from the cold.¹⁵

Non-protection from the sun is also a relevant aspect, since, in addition to offering risks of muscle cramps, fatigue, fainting spells, heat stroke, it increases the risk of developing skin
cancer. These conditions have direct implications for the health of workers, besides reinforcing the need for the use of sunscreen, hats and clothes that protect the body.\textsuperscript{15}

Another important point, as a way of promoting health, was to maintain the family relationship.

\textit{You have to have a good relationship with the family [...] the agrobusiness workers are relatives, then you need to have a interaction; otherwise, there is a stressful environment, bad to work.} (Figo)

The family is a group of people considered as a social unit, a systemic whole, and is marked by the relationships between the members that compose it and the outside environment. The family institution plays important roles in society, such as affection, education and socialization. It can be considered a communication system that contributes to the construction of integrating solutions for its members.

It is the family responsibility to promote the complete and harmonious development of the personality of each individual in an environment of happiness, love and understanding. The construction of a context with these characteristics will influence the health of the respective members; otherwise, it can become a stressful environment.\textsuperscript{16}

The lack of physical activity is considered one of the significant public health problems in the XXI century. In addition to representing an important component for a healthy lifestyle and health promotion, the practice of exercises acts in the prevention of chronic non-communicable diseases. Physical inactivity ranks fourth among the main risk factors for global mortality, supplanted by hypertension, smoking and high blood glucose.\textsuperscript{17} However, young family farmers reported that they do not perform physical exercises because they consider that they already perform various activities in rural work.

\textit{Very little physical exercise, we just make walking, but because we have to make it at work, but stopping for some time to make exercises, no.} (Amora)
physical exercise is the everyday tasks. More or less if it were to compare with the city, the gym here is constant [...]. (Ameixa)

The work in the rural environment involves physical activities such as frequent walks, transportation of materials and products. However, physical exercise is that planned and structured practice that is intended to improve the components of physical conditioning, such as balance, flexibility, strength, coordination, agility, as well as muscular and cardiorespiratory resistance.¹⁷

Physical exercises can be understood as simpler actions, such as walking, for example. In order to remain active, good flexibility must be maintained, an essential component of physical fitness that, associated with adequate levels of strength, improves the efficiency of movement and reduces the incidence of muscle strain. This aspect is essential to avoid clinical pictures of pain, common to rural workers.¹⁷-¹⁸

In this study, it was highlighted that health promotion is not always carried out by young family farmers, as some stated that they cannot find time to take care of themselves.

We don’t take time to do 15 minutes of exercise to strengthen the spine, the muscles, we don’t stop, we really don’t take care of ourselves. (Amora)

The work in agriculture involves both physical activities and direct contact with chemical, physical and biological agents of different natures. Accordingly, the development of health problems, such as low back pain and loss of flexibility, may be associated with the overload of work-related activities and the lack of preventive or compensatory activities.¹⁷

It is clear, in Amora’s speech, the lack of self-care, which is a regulatory function that allows people to perform activities focused on preserving life, health, development and well-being. In this context, it would be appropriate to encourage self-care practices for the rural population.¹⁹

Health promotion is the conceptual understanding and the practice of public policies, and should be focused on both the individual and the collective. This is possible through the
search for quality of life, the autonomy and the encouragement for self-care,\textsuperscript{11} which would be very important for the health of young family farmers.

Other young family farmers also stated that they do not hold health promotion measures.

\textit{I don’t think it’s enough, sometimes we’re in a hurry, do everything anyway, don’t even think about health[...].} (Pêssego)

\textit{I think there’s [...] little concern [...] we don’t even think about promoting health.} (Lima)

The absence of care focused on promoting health is due to the fact that it is an audience that needs the most active involvement of the health sector. The demands of young people have not been considered a priority by the health service, since the offer of actions is conditioned to the availability of professionals and/or health teams. This reality makes the offer asymmetric and non-systematic, with conceptions sometimes stereotyped and outside the reality of the population.\textsuperscript{20}

With the purpose of overcoming the described situation, nurses should seek strategies to promote the health of rural workers by means of actions that are appropriate to the needs of each location, make sense in the lives of young farmers and, consequently, are effective.

**Perspectives with health: how will your aging be held?**

Health is the first and most important form of wealth for life and should, for this reason, be constructed on a daily basis, within the possibilities and by the individuals themselves. Because it is related to the quality of life of the young adult, it is achieved through personal satisfaction, the development of social skills and, also, the relatively long-lasting maintenance of behaviors.\textsuperscript{21}

When asked about aging, some young people reported that they envisage old age in a healthy way.
I’d really like to get a very healthy life in the future, not having to take too many medications. (Pêssego)

I hope I’m healthy, but you see that people in their early 50s have cancer, and are dying, nowadays. (Lima)

In order to promote health in the present, it is necessary to reach the first level of preventive and health promotion measures, acting before the onset of the illness. Health promotion is a strategy that draws the attention of people to risk factors and health problems. It should drive attention to the care of the individual, in this case, of the young family farmer, and devise mechanisms that reduce situations of vulnerability. In this study, one participant reported that, in rural areas, it is possible to have a better quality of life, compared to urban life.

We can produce what we consume and have a better quality of life than in the city, buying everything from the market, everything industrialized, I think it’s much worse for people’s health. (Uva)

For many people, the countryside is qualified as a place that promotes quality of life. By revering the physical and social environment, family agriculture emerged as a new collective integrating paradigm when declaring the promotion of the well-being and the quality of life of rural workers as an assumption. In this scenario, this model is opposed to the productive, technicist and predator rural entrepreneur (employer agriculture).

The act of measuring quality of life is a complex task, since its concept is related to a series of aspects, such as self-esteem and personal well-being. The understanding of these aspects may be conditioned by the cultural and ethical factors, the religiosity, the lifestyle, the satisfaction with jobs or daily activities, the environment in which the person lives, among others.

It is important to highlight that the expanded concept of health is considered as the result of the conditions of food, housing, education, income, environment, work, transportation, employment, leisure, freedom, access and possession of land, as well as access to health
services. From this perspective, health is mainly the result of forms of social organization and production, which may lead to inequalities in living standards.

Leisure was reported by the participants of this study as a way of promoting health:

I play soccer during the weekends to laugh, see friends again, for leisure.
(Pêssego)

[... on weekends, we use it for fun, I like to play soccer and meet my friends. (Figo)

Leisure activities refer to a specific area of human experience with its own benefits, including freedom of choice, creativity, satisfaction, fun and increased pleasure and happiness. This determinant of health condition encompasses broad forms of expression and activities, whose elements have physical, intellectual, social, artistic or spiritual nature.

For young farmers, the introduction of new technologies to reduce physical effort is also a way of promoting health.

We’ve to keep replacing the workforce with machines [...] to be less grueling for health [...] because today, in fact, it’s already proven that, from so much repetitive servisse, you end up having serious damages. (Figo)

By considering the limited mechanization of the sector, agricultural work on family farms is characterized by high physical effort, which has an impact on the health of farmers, in addition to compromising productivity. The applied ergonomics has the potential to mitigate health problems for rural workers, thereby entailing significant changes in quality of life and, as a consequence, increased productivity.

Excessive physical effort causes long-term damages, since it can cause Repetitive Strain Injury (RSI) and Work-Related Musculoskeletal Disorders (WMSD). These wear and tear on the structures of the musculoskeletal system affect not only agricultural workers, but several professional categories. In this survey, the interviewees also cited the need to care for the musculoskeletal problems.
Spine problems, we’ve to be careful not to lift weight, as you get older, it gets a little more hard [...]. (Laranja)

[…] However, I’m afraid of bone wear, these things, that we walk a lot during the day, the spine mainly. (Ameixa)

Osteomuscular or musculoskeletal and connective tissue diseases are the most common among rural workers. In this sense, we should highlight the inflammation of the joints and ligaments, chronic low back pain, cervical pain and dorsal spine problems.25

The accomplishment of routine laboratory tests, as a means of prevention and, consequently, health promotion, was also cited by the participants.

Currently, I think I’m young, we don’t do so much exams; however, as the years go by, do some exams [...]. (Uva)

[…] seek to prevent with exams, as soon as possible to advance this check-up routine to try to minimize, not to exclude the risks [...]. (Pêssego)

Routine examinations may be important tools for the assessment of the health status.6

The mentions of this strategy in the speeches demonstrate the predominance of the biomedical model in society, as they reveal the concern in the diagnosis of diseases, without taking into account the social determinants.

Hereditary disease issues were also highlighted in the interviews:

My biggest concern is the hereditary issue, my grandfather’s brothers, and my grandfather all died from cancer [...] my father is undergoing cancer treatment, my uncle also underwent treatment [...] and we know that the pesticides are well linked to cancer. (Pêssego)

There are rare cases of cancer that are due exclusively to hereditary, family and ethnic factors, despite the fact that the genetic factor plays an important role in oncogenesis.26 External causes, represented by the environment and the habits or customs typical of a social and cultural environment, are the main risk factors for the development of cancer. Accordingly, the adopted lifestyle interferes with the development of neoplasms.
The incidence of cancer may be directly linked to the use of agrochemicals. Therefore, it is up to health professionals to introduce debates on this topic in communities, thereby seeking to face this situation and produce strategies to mitigate or eliminate the contamination of rural workers. The perception of farmers and consumers about the high risks of using agrochemicals for the human health and the environment is essential in changing this reality.27

In spite of the reports of the participants about health care, some of the young farmers state that they are not concerned about possible consequences in the future.

*I didn’t stop [...]. I’m not too concerned with that, but I’d have to be more concerned.* (Maracujá)

*[... you’re new today, you don’t feel the risks, you don’t think you’re at risk for the future and you don’t stop to think about it, then you’ll realize that, in the long run, it can shock you* [...]. (Figó)

There is a gap in the pertinent literature on why young people do not care about their health. A possible explanation for this lack of concern may be related to greater physical resistance in youth, or because young people believe that exposure to risks in the present will not affect their health in adulthood and their healthy aging. In this perspective, it is necessary to establish a horizontal relationship between young people and health professionals, especially nurses, with a view to seeking a new way of approaching health care. The incorporation of the idea of the youth as a protagonist in the construction of the personal and collective health process will confer a potential for emancipation, autonomy and social responsibility.3

**Final considerations**

Health promotion is held by the young family farmer in the care of food, water intake, adaptations to the climate and maintenance of good family relationships. It was highlighted that physical exercises are not practiced by the participants because the work activities require
intense physical effort. In view of the shortage of time due to intense tasks, some of the interviewees stated that they do not usually promote their own health.

Some of the young farmers show concerns about their health in old age, by listing leisure time as a strategy to promote health. The need to introduce new technologies intended to relieve physical effort and to carry out preventive exams in the face of hereditary diseases and associated comorbidities was mentioned, by relating them to the activities carried out at present. Conversely, other interviewees did not consider the concern about their health conditions in the future to be relevant.

In this perspective, it is up to nurses to awaken the rural population, so that the existing policies for effective health promotion are put into practice. We can envisage the need for surveys that deal with the theme proposed here, as there are few studies on the health promotion of young family farmers.

Accordingly, we should highlight the introduction of health education as a way of promoting health in the rural population. With that, we would seek not only to share knowledge, but to establish links between professionals and farmers, thereby contributing to social inclusion and their active participation in self-care actions.

There are barriers and limits to health promotion practices, and it is necessary to reorganize them to: provide equal health conditions to all young farmers; guarantee their rights in the Brazilian Unified Health System; generate possibilities to improve the quality of life of these farmers at present, in adulthood, as well as in the process of healthy aging.

Although the study was performed in a town where family agriculture is intense, young people generally move to the urban area in search of a job with a steady salary. Therefore, the difficulty in finding the 10 young farmers was the main limitation of this study. This difficulty reveals another problem. By recognizing that family agriculture is responsible for the food that sustains many urban households, the permanence of youth in the countryside needs to be
discussed. Similarly, the establishment of incentives and benefits for these young people signalizes the need for investigations involving this audience.

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