145 - AGRIBUSINESS WORKER'S LIFESTYLE: SOCIOECONOMIC PROFILE AND HEALTH CONDITIONS

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INTRODUCTION

Over the last decades the transformation process of the means of production composed a new social structure, which impacted the people's lifestyle. The new population' profile, particularly workers, has shown increased prevalence of overweight associated with metabolic abnormalities, cardiovascular disease, among others. Such characterization can also be seen in agribusiness workers (RAPHAELLI; AZEVEDO; HALLAL, 2011).

Changes in the sphere of work, leisure and lifestyle triggered a decrease in physical activity, increasing levels of inactivity, thereby contributing to the increased prevalence of overweight. Such changes are added to the process of development and modernization of current societies (WANDERLEY; FERREIRA, 2010).

Obesity is known as a multifactorial chronic disease (LEITE et al, 2009), characterized by the abnormal or excessive accumulation of fat (WHO, 2004), and can be assessed by body mass index (BMI) (LINHARES et al, 2012). It is defined as a public health problem that affects both developed and underdeveloped countries. In Brazil this scenario is not different, as shown by the higher rates of overweight and obesity occurring in the South and Southeast (FERREIRA, FIGUEIRA, 2012).

There are certain factors that promote excess weight, such as changes in food consumption and reduced physical activity, as well as the influence of socioeconomic factor, family microenvironment, genetic factors, and medication use for prolonged periods (WANDERLEY; FERREIRA, 2010; FERREIRA; FIGUEIRA, 2012). This condition interferes with quality of life and work, especially considering hard work and physical labor, such as farm workers (PAIXÃO; PAIXÃO, 2009).

Nevertheless, it is worth highlighting that non-transmissible chronic diseases are correlated with social determinants of health, for instance, differences in access to goods and services, low education and income, social inequality and lack of information and orientation - which can be observed nowadays (BRASIL, 2013).

In this perspective, the present study aims to verify the occurrence of diseases that affect agribusiness workers according to socioeconomic status and body mass index (BMI).

METHOD

This is a descriptive and quantitative study, in which the subjects were 140 agribusiness workers and farmers belonging to the municipalities of Santa Cruz do Sul, Vale Verde, Passo do Sobrado, Candelária, Encruzilhada do Sul, Pantano Grande, Rio Pardo and General Câmara, which integrate the Research "Screening risk factors related to overweight in agribusiness workers using new analytical and health information technologies", previously approved by the Ethics Committee on Human Research at the University of Santa Cruz do Sul (UNISC) under protocol number 2509/10.

In this study, it was described the characteristics of rural workers in terms of demographic profile, BMI, socioeconomic classes and self-reported diseases, data collected from July 2012 to August 2013.

At first contact with the research subject, when it was held external seminar, it was applied a questionnaire on lifestyle, previously validated in a pilot project (POHL et al., 2010), consisting of the following items: a) identification and socioeconomic indicators b) organization of daily life c) physical and sports activities; d) health indicators, e) anthropometric and food consumption standard. The data selected for this study are part of the block 'a' and 'd', focusing on the first block the demographic variables (gender, age, marital status, and socioeconomic status).

For the socioeconomic classification was used the approach of the Brazilian Association of Research Companies (ABEP, 2013), in which economic classes (A1, A2, B1, B2, C1, C2, D and E) are drawn from a score obtained according to the household characteristics (presence and amount of certain items of comfort and schooling level of the household head).

In block 'd', there were questions regarding aspects on personal diseases, with dichotomous response option (Yes/no), in which subjects self-reported existing pathologies or alterations through the question "Do you have problems with", having as response options: hypertension, diabetes, overweight, high cholesterol level, triglycerides abnormalities, gastritis, ulcer, cancer, heart problems, sleep disorder or the absence of problems.

The anthropometric measures of height and weight, to calculate BMI, were measured by prior appointment, at the Laboratory of Physical Activity and Health (LAFISA), at UNISC, through anthropometric scale (Welmy SA, Santa Bárbara do Oeste, Brazil) , and subsequently categorized according to the parameters of the World Health Organization (WHO, 2004).

Data were tabulated and analyzed using the program StatisticalPackage for Social Sciences for Windows (SPSS - version 20.0), using descriptive statistics, consisting of frequency and percentage.

RESULTS

There was, in this study, a predominance of females (62.9%), married individuals (75.0%), with a mean age of 51.04 years. Regarding socioeconomic classes, there was a preponderance of classes B2 and C1 (respectively 39.3% and 33.6%). While, in relation to BMI, it was observed the prevalence of overweight in 87.9% of the subjects (47.1% overweight and 40.8% obese).

Table 1. Demographic characteristics and distribution of body mass index.

Demographic variables	Female n (%)	Male n (%)	Total n (%)
Gender	88 (62,9)	52 (37,1)	140 (100,0)
Age (years)*	50,68 (10,78)	51,63 (10,46)	51,04 (10,63)
Marital Status			
Single	7 (7,9)	8 (15,4)	15 (10,7)
Married	66 (75,0)	39 (75,0)	105 (75,0)
Widow	5 (5,7)	1 (1,9)	6 (4,3)
Divorced/Separated	5 (5,7)	1 (1,9)	6 (4,3)
Others	5 (5,7)	3 (5,8)	8 (5,7)

Socioeconomic Class**			
B1	4 (4,5)	-	4 (2,9)
B2	29 (33,0)	26 (50,0)	55 (39,3)
C1	33 (37,5)	14 (26,9)	47 (33,6)
C2	17 (19,3)	10 (19,2)	27 (19,3)
D	5 (5,7)	2 (3,8)	7(5,0)
BMI			
Recommended Range	9 (10,2)	8 (15,4)	17 (12,1)
Overweight	32 (36,4)	34 (65,4)	66 (47,1)
Obesity type I	32 (36,4)	9 (17,3)	41 (29,3)
Obesity type II	11 (12,5)	1 (1,9)	12 (8,6)
Obesity type III	4 (4,5)	-	4 (2,9)

* x (Standard Deviation); ** There were no subjects in the other socioeconomic classes; -: Representation of value zero.

By focusing on the association between BMI and self-reported diseases (Table 2), it is observed that the main diseases reported were sleep disorders, hypertension, overweight, cholesterol and gastritis. There was no reference to cancer, as well as 45 people (32.1%) reported absence of disease. It is noteworthy to say that 97.6% of hypertensive patients, 96.7% of those with abnormal levels of cholesterol and 88.5% of those reporting gastritis, were classified as overweight.

Table 2. Distribution of BMI in relation to self-reported diseases

Diseases	IMC					Total n (%)
	Recommended Range n (%)	Overweight n (%)	Obesity type I n (%)	Obesity type II n (%)	Obesity type III n (%)	
HBP						
Yes	1 (0,7)	17 (12,1)	13 (9,3)	10 (7,1)	3 (2,1)	44 (31,4)
No	16 (11,4)	49 (35,0)	28 (20,0)	2 (1,4)	1 (0,7)	96 (68,6)
Diabetes						
Yes	-	6 (4,3)	2 (1,4)	-	-	8 (5,7)
No	17 (12,1)	60 (42,9)	39 (27,9)	12 (8,6)	4 (2,9)	132 (94,3)
Overweight						
Yes	-	7 (5,0)	20 (14,3)	5 (3,6)	3 (2,1)	35 (25,0)
No	17 (12,1)	59 (42,1)	21 (15,0)	7 (5,0)	1 (0,7)	105 (75,0)
Cholesterol						
Yes	1 (0,7)	20 (14,3)	8 (5,7)	1 (0,7)	-	30 (21,4)
No	16 (11,4)	46 (32,9)	33 (23,6)	11 (7,9)	4 (2,9)	110 (78,6)
Triglycerides						
Yes	-	5 (3,6)	5 (3,6)	1 (0,7)	1 (0,7)	12 (8,6)
No	17 (12,1)	61 (43,6)	36 (25,7)	11 (7,9)	3 (2,1)	128 (91,4)
Gastritis						
Yes	3 (2,1)	8 (5,7)	12 (8,6)	2 (1,4)	1 (0,7)	26 (18,6)
No	14 (10,0)	58 (41,4)	29 (20,7)	10 (7,1)	3 (2,1)	114 (81,4)
Ulcer						
Yes	-	4 (2,9)	3 (2,1)	1 (0,7)	-	8 (5,7)
No	17 (12,1)	62 (44,3)	38 (27,1)	11 (7,9)	4 (2,9)	132 (94,3)
Heart Problems						
Yes	1 (0,7)	2 (1,4)	2 (1,4)	-	-	5 (3,6)
No	16 (11,4)	64 (45,7)	39 (27,9)	12 (8,6)	4 (2,9)	135 (96,4)
Sleep Disorder						
Yes	5 (3,6)	26 (18,6)	18 (12,9)	8 (5,7)	3 (2,1)	60 (42,9)
No	12 (8,6)	40 (28,6)	23 (16,4)	4 (2,9)	1 (0,7)	80 (57,1)
No disease						
Yes	10 (7,1)	28 (20,0)	7 (5,0)	-	-	45 (32,1)
No	7 (5,0)	38 (27,1)	34 (24,3)	12 (8,6)	4 (2,9)	95 (67,9)

HBP: High Blood Pressure. -: Representation of value zero.

The highest percentage of all self-reported diseases was found in socioeconomic classes B2 and C1 (Table 3), since the sample subjects mostly belong to these classes (Table 1).

Table 3. Distribution of socioeconomic classes in relation to self-reported diseases

Diseases	Socioeconomic Class					Total n (%)
	B1 n (%)	B2 n (%)	C1 n (%)	C2 n (%)	D n (%)	
HBP						
Yes	1 (0,7)	13 (9,3)	18 (12,9)	11 (7,9)	1 (0,7)	44 (31,4)
No	3 (2,1)	42 (30,0)	29 (20,7)	16 (11,4)	6 (4,3)	96 (68,6)
Diabetes						
Yes	-	5 (3,6)	1 (0,7)	2 (1,4)	-	8 (5,7)
No	4 (2,9)	50 (35,7)	46 (32,9)	25 (17,9)	7 (5,0)	132 (94,3)
Overweight						
Yes	1 (0,7)	10 (7,1)	18 (12,9)	5 (3,6)	1 (0,7)	35 (25,0)
No	3 (2,1)	45 (32,1)	29 (20,7)	22 (15,7)	6 (4,3)	105 (75,0)
Cholesterol						
Yes	-	8 (5,7)	12 (8,6)	10 (7,1)	-	30 (21,4)
No	4 (2,9)	47 (33,6)	35 (25,0)	17 (12,1)	7 (5,0)	110 (78,6)
Triglycerides						
Yes	-	3 (2,1)	7 (5,0)	1 (0,7)	1 (0,7)	12 (8,6)
No	4 (2,9)	52 (37,1)	40 (28,6)	26 (18,6)	6 (4,3)	128 (91,4)
Gastritis						
Yes	-	9 (6,4)	9 (6,4)	7 (5,0)	1 (0,7)	26 (18,6)
No	4 (2,9)	46 (32,9)	38 (27,1)	20 (14,3)	6 (4,3)	114 (81,4)
Ulcer						
Yes	-	3 (2,1)	4 (2,9)	-	1 (0,7)	8 (5,7)
No	4 (2,9)	52 (37,1)	43 (30,7)	27 (19,3)	6 (4,3)	132 (94,3)
Heart Problems						
Yes	-	2 (1,4)	2 (1,4)	1 (0,7)	-	5 (3,6)
No	4 (2,9)	53 (37,9)	45 (32,1)	26 (18,6)	7 (5,0)	135 (96,4)
Sleep Disorder						
Yes	1 (0,7)	21 (15,0)	25 (17,9)	10 (7,1)	3 (2,1)	60 (42,9)
No	3 (2,1)	34 (24,3)	22 (15,7)	17 (12,1)	4 (2,9)	80 (57,1)
No disease						
Yes	2 (1,4)	25 (17,9)	8 (5,7)	6 (4,3)	4 (2,9)	45 (32,1)
No	2 (1,4)	30 (21,4)	39 (27,9)	21 (15,0)	3 (2,1)	95 (67,9)

HBP: High Blood Pressure. -: Representation of value zero.

DISCUSSION

A review of Wanderley and Ferreira (2010) found that Brazil has replaced the problem of food shortages by dietary excess, partly by mechanization of the work process and the increased participation of the population in the tertiary sector of the economy, as well as the reduction of physical activities, since this occupation requires a lower energy demand. This information corroborates the profile of agribusiness workers, since most of the sample were overweight.

In the study by Linhares et al (2012), the aim was to describe the distribution of general and abdominal obesity in adults living in the city of Pelotas, in 2010, compared with demographic and socioeconomic characteristics. This study found that 26.1% of the individuals were classified as obese and nearly one in three presented BMI in the recommended range. From the subjects classified as obese, 21.7% were men and 29.2% women. In conclusion, the author states that the general obesity has increased over the last 10 years, in adults aged 20 years or over in the municipality.

Menegat and Fontana (2010) in a study with 22 rural workers, all residents of districts belonging to a municipality in the North West Region of Rio Grande do Sul, with activities in agriculture and/or cattle farming found results indicating the predominance of married subjects and female gender, prevailing the spinal abnormalities as the main health problem. It was also found hypertension in 27.3% of the respondents, some of these were found to have atherosclerosis or have already had high LDL cholesterol level. Poisoning and allergies were also highlighted, as well as occupational accidents. The authors noted that, currently, the cardiovascular and metabolic diseases have become "common" among the population of both urban and rural areas.

In the study by Cockell et al (2005), more than half of the farmers said they did not have hypertension (57.8%), however, 21.9% of the subjects had never measured blood pressure. These results corroborate those of the present study, in which 67.86% of agribusiness workers reported not having hypertension, although 31.6% of them have not checked or controlled blood pressure.

In addition, the authors found that 60.9% of the subjects did not have diabetes, and 34.4% of them had never performed tests for analysis of blood glucose levels. It is worth noting that the results of this study may be underestimated by presenting memory biases (self-reported method), besides the lack of awareness on the part of the subjects regarding their health conditions.

CONCLUSION

Given the findings of this study, it is considered that these results point to the lack of control and monitoring of anthropometric, biochemical and cardiorespiratory profiles, and consequently the level of misinformation of rural workers about their health status. These issues support the need for more effective actions to promote health, as well as strategies that enhance the access of this population to networks of health care. Preventive measures could minimize the effects of excess weight and the development of associated diseases. Therefore, the adoption of healthier lifestyles could reduce levels of overweight, leading the BMI classification to recommended ranges, which would certainly reduce the risk of both development of associated diseases and the personal and social cost entailed by different pathologies.

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AGRIBUSINESS WORKER'S LIFESTYLE: SOCIOECONOMIC PROFILE AND HEALTH CONDITIONS

ABSTRACT

Over the last decades the transformation process of the means of production composed a new social structure, which impacted in the people's lifestyle. The new population' profile, particularly workers, has shown increased prevalence of overweight associated with metabolic abnormalities, cardiovascular disease, among others. Such characterization can also be seen in agribusiness workers. In this perspective, this study aims to investigate the relationship between diseases self-reported by agribusiness workers and farmers, relating data of body mass index (BMI) and socioeconomic status. The methodology was based on a quantitative descriptive study, in which the subjects were 140 rural producers. Statistical analysis was performed using the Statistical Package for Social Sciences, through frequency and percentage. Among those surveyed, 62.9% were

female, with a mean age of 51.04 years (SD: 10.63). There was predominance of socioeconomic class B2 (39.3%) and excess weight (87.9%). The diseases most commonly cited were Hypertension (HBP), cholesterol, gastritis, and sleep disturbance, and when relating these diseases to BMI, there is a predominance of overweight and obesity. In addition, correlating self-reported diseases with the socioeconomic, it is possible to realize that all of them are predominantly in classes B2 and C1. From these results, it was noted the importance of promoting health and especially to sensitize this population about the risks of being overweight, which most of the time lacks information and guidance on health.

KEY WORDS: lifestyle, obesity, diseases.

STYLE DE VIE DES TRAVAILLEURS DE L'AGRO-INDUSTRIE: PROFIL SOCIO ÉCONOMIQUE ET DES CONDITIONS DE SANTÉ

RÉSUMÉ

Au cours des dernières décennies, le processus de transformation des moyens de production a créé une nouvelle structure sociale , qui a touché le mode de vie des gens. Le nouveau profil de la population , en particulier des travailleurs ont démontré la prévalence du surpoids associé à des anomalies métaboliques , les maladies cardiovasculaires , entre autres. Une telle caractérisation peut également être vu dans les travailleurs de l'agro-industrie. Dans cette perspective, cette étude vise à étudier la relation entre les maladies auto-déclarées par les travailleurs de l' agro-industrie et les producteurs ruraux, mettant en rapport les données de l' indice de masse à corporelle (IMC) et le statut socioéconomique . La méthodologie a été basée sur une étude quantitative descriptive, dans laquelle les sujets étaient 140 producteurs ruraux. L'analyse statistique a été réalisée en utilisant le StatisticalPackage du programme des sciences sociales , à travers la fréquence et le pourcentage. Parmi les personnes interrogées, 62,9% étaient des femmes, avec un âge moyen de 51,04 ans (écart-type: 10,63) . On observe une prédominance de la classe socio-économique B2 (39,3%) et de surpoids (87,9 %). Les maladies les plus fréquemment citées étaient l'Hypertension Artérielle Systémique (HAS), le cholestérol , la gastrite, et des troubles du sommeil , et en reliant ces maladies à l'IMC , on observe une prédominance du surpoids et de l'obésité. En outre , les maladies auto-déclarés en corrélation avec la classification socio-économiques rendent compte qu'ils sont tous principalement dans les classes B2 et C1. A partir de ces résultats , il a été noté l'importance de la promotion de la santé et surtout de sensibiliser cette population sur les risques d'être en surpoids , qui manquent le plus souvent de l'information et des conseils sur la santé.

MOTS-CLÉS: Travailleur de la santé, travailleur ruraux, mode de vie.

ESTILO DE VIDA DEL TRABAJADOR DE LA AGROINDUSTRIA: PERFIL SOCIOECONÓMICO Y CONDICIONES DE SALUD.

RESUMEN

Desde las últimas décadas el proceso de transformación de los medios de producción constituye una nueva estructura social, lo que impactó en el estilo de vida de las personas. El nuevo perfil de la población, en particular de los trabajadores, ha sido evidenciada la prevalencia de exceso de peso, asociada con alteraciones metabólicas, enfermedades cardiovasculares, entre otras. Dicha caracterización también se puede observar en trabajadores de la agroindustria. En esta perspectiva, este estudio tiene como objetivo verificar la relación entre las enfermedades autorreferidas por los trabajadores de la agroindustria y productores rurales, relacionando datos del Índice de Masa Corporal (IMC) y clasificación socioeconómica. La metodología se basó en un estudio descriptivo cuantitativo, en el que fueron sujetos 140 productores rurales. Para análisis estadístico, se utilizó el programa Statistical Packagefor Social Sciences, a través de frecuencia y porcentaje. Entre los individuos investigados, el 62,9% pertenecían al sexo femenino, siendo el promedio de edad de 51,04 años (DP: 10,63). Hubo predominancia de la clase socioeconómica B2 (el 39,3%) y de exceso de peso (el 87,9%). Las enfermedades más citadas fueron Hipertensión Arterial Sistémica (HAS), colesterol, gastritis y disturbio del sueño, siendo que al relacionar dichas enfermedades con el IMC, se nota predominancia de sobrepeso y obesidad. Además, correlacionando las patologías autorreferidas con la clasificación socioeconómica se percibe que todas se encuentran, predominantemente, en las clases B2 y C1. Desde estos resultados, se constató la importancia de promover la salud y principalmente sensibilizar esta población, que a menudo carece de informaciones y orientaciones sobre la salud, en cuanto a los riegos del exceso de peso.

PALABRAS CLAVE: salud del trabajador, trabajador rural, estilo de vida.

ESTILO DE VIDA DO TRABALHADOR DA AGROINDÚSTRIA: PERFIL SOCIOECONÔMICO E CONDIÇÕES DE SAÚDE

RESUMO

Nas últimas décadas o processo de transformação dos meios de produção constituiu uma nova estrutura social, o que impactou no estilo de vida das pessoas. O novo perfil da população, em particular dos trabalhadores, têm evidenciado prevalência de excesso de peso, associado a alterações metabólicas, doenças cardiovasculares, entre outras. Tal caracterização também pode ser vista em trabalhadores da agroindústria. Nessa perspectiva, este estudo tem como objetivo verificar a relação entre as doenças autorreferidas pelos trabalhadores da agroindústria e produtores rurais, relacionando dados do índice de massa corporal (IMC) e classificação socioeconômica. A metodologia baseou-se num estudo descritivo quantitativo, em que foram sujeitos 140 produtores rurais. Para análise estatística, foi utilizado o programa Statistical Package for Social Sciences, através de frequência e percentual. Entre os indivíduos pesquisados, 62,9% pertenciam ao sexo feminino, sendo a média de idade de 51,04 anos (DP: 10,63). Houve predominância da classe socioeconômica B2 (39,3%) e de excesso de peso (87,9%). As doenças mais citadas foram Hipertensão Arterial Sistêmica (HAS), colesterol, gastrite e distúrbio do sono, sendo que ao relacionar tais enfermidades com o IMC, nota-se predominância de sobrepeso e obesidade. Além disso, correlacionando as patologias autorreferidas com a classificação socioeconômica percebe-se que todas se encontram, predominantemente, nas classes B2 e C1. A partir destes resultados, constatou-se a importância de promover a saúde e, principalmente, sensibilizar esta população quanto aos riscos do excesso de peso, que na maioria das vezes carece de informações e orientações sobre a saúde.

PALAVRAS-CHAVE: saúde do trabalhador, trabalhador rural, estilo de vida.