

RESEARCH ARTICLE

OPEN ACCESS

HEALTH PROFILE OF UNIVERSITY AGENTS FROM A PUBLIC EDUCATION INSTITUTION

*¹Geiza Rafaela Bobato, ¹Midiã Vanessa dos Santos Spekalski, ^{1,2}Luciane Patrícia Andreoni Cabral, ^{1,3}Cristina Berger Fadel, ^{1,4}Everson Augusto Krum, ^{1,2}Guilherme Arcaro and ^{1,2}Danielle Bordin

¹Nursing and Public Health Department, State University of Ponta Grossa (UEPG), Ponta Grossa, Paraná, Brazil

²Regional University Hospital of Campos Gerais, Ponta Grossa (HURCG), Paraná, Brazil

³Dentistry Department, State University of Ponta Grossa (UEPG), Ponta Grossa, Paraná, Brazil

⁴Clinical Analysis Department, State University of Ponta Grossa (UEPG), Ponta Grossa, Paraná, Brazil

ARTICLE INFO

Article History:

Received 08th January, 2019
Received in revised form
18th February, 2019
Accepted 09th March, 2019
Published online 30th April, 2019

Key Words:

Health. Worker.
Noncommunicable Diseases.

ABSTRACT

Objective: To know the health profile of workers from a Brazilian higher education institution (HEI). **Method:** Cross-sectional, quantitative, exploratory descriptive study, conducted with 615 servers from the Brazilian HEI. The data collection includes the application of a structured questionnaire containing sociodemographic and labor characteristics, self-perceptions in health, previous diagnoses, and lifestyle. Data were analyzed descriptively. **Results:** Prevalence of women (53%), married (59%), complete high school (38%) and over 40 years (28%). The diseases that most affected the workers were high cholesterol, hypertension, diabetes and depression. Most use continuous medication (57%) and do not perform any type of physical activity (53%). Still, 14% are smokers, with low dependence, mostly and 45% reported drinking alcohol. **Conclusion:** It is important to target the investigated servers to individual and collective health care programs, advocating prevention to reduce future comorbidities, as well as to qualify their work process.

Copyright © 2019, Geiza Rafaela Bobato et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Geiza Rafaela Bobato, Midiã Vanessa dos Santos Spekalski et al. 2019. "Health profile of university agents from a public education institution", *International Journal of Development Research*, 09, (04), 27281-27285.

INTRODUCTION

In the last decades, global reflections on integral attention to Worker Health have been occupying a privileged space in the public policy managers' agenda, aiming at the consolidation of assistance actions, promotion, surveillance and prevention of work-related injuries. In Brazil, the principles and directives of the Unified Health System (SUS) have led to the creation of a National Health Surveillance System, with one of its strategic components being Worker Health Surveillance (BRASIL, 2009). It aims at promoting health and reducing the morbidity and mortality of the working population through the integration of actions that intervene in the aggravations and their determinants, resulting from development models and productive processes. In fact, the establishment of the causal relationship or the nexus between a particular health event, individual or collective, potential or installed, and a given

working condition starts at the identification and control of the health risk factors present in the environments and work conditions and from the diagnosis, treatment and prevention of damages, injuries or diseases caused by work, in the individual and in the collective of workers (BRASIL, 2001). In the current field of Brazilian epidemiological configuration and due to the social and economic transformations that Brazil has been experiencing since the last century, there has been an increasing reduction on the infectious diseases incidence and a consequent increase in the prevalence and mortality rates due to Chronic Noncommunicable Diseases (NCDs), which account for about 70% of the world's causes of death, especially diseases of the circulatory system (31.3%), cancer (16.3%), diabetes (5.2%), and chronic respiratory diseases (5.8%), reaching individuals from all socioeconomic strata (BRASIL, 2011). Regarding to their risk factors, the main causes of NCDs have been classified as modifiable or non-modifiable. Among the modifiable factors are: hypertension, alcohol consumption, diabetes mellitus, smoking, sedentary lifestyle, stress, obesity and high cholesterol and among the non-modifiable factors: age, heredity, sex and race. However,

*Corresponding author: Geiza Rafaela Bobato,
Nursing and Public Health Department, State University of Ponta Grossa (UEPG), Ponta Grossa, Paraná, Brazil

it is believed that the impact generated by NCDS can be reversed through cost-effective interventions of improvements in health care, early detection and timely treatment (BRASIL, 2011). Considering the importance that the dimensions of health and well-being in the work environment have assumed in recent years for the qualification and consolidation of sensitive and inclusive management practices, and that knowledge of modifiable risk factors to NCDS is fundamental to the quality of life and human work practices, the present study aims at knowing the health profile of workers from a Brazilian higher education institution (HEI).

MATERIALS AND METHODS

This is a cross-sectional, quantitative, exploratory, descriptive study, developed with the totality of workers who work as university agents in a Brazilian higher education institution (n = 615). The data presented are the result of an extension project titled Pro-Server: health and quality of life at work, which works through a multiprofessional health team to collect, diagnose and intervene in health among the population investigated. The base year for the study was 2018. The inclusion criteria were: to act as a university agent, in a temporary or effective condition; be active in the function performed. Individuals who were on medical leave or holidays and who did not consent to participating in the study were excluded. Data were collected through a structured questionnaire, adapted from the Brazilian Ministry of Health instruments for situational health diagnosis of the population (PNS, 2013, PNAD, 2015) and clinical examination. The investigated information was sociodemographic and labor, self-perception in health, health history and broad health condition. The data were collected through a multidisciplinary health team composed of physiotherapists, dentists, nurses, pharmacists and social workers. The collection took place in the higher education institution itself, in health outpatient clinics, in a period previously scheduled by the human resources department, considering the normal working hours. After being explained by trained health professionals about the objectives, means and intermedia of collection, analysis and result of the information, the individuals, when in agreement, of free and spontaneous desire, participated in the project by signing the informed consent term. Data were tabulated in Microsoft Excel 2013® software and analyzed descriptively by absolute and relative frequency. The research was approved by the Committee of Ethics in Human Research from a Higher Education Institution (n° 99995518.4.0000.0105), respecting the dictates of resolution 466/12 from the National Health Council and the Declaration of Helsinki.

RESULTS

In this study 615 university agents were evaluated. Of these, the majority were female, with a mean age of 47 years, married, white, with high school education, average monthly income of US\$1999,63 (Table 01). The most prevalent chronic conditions in the workers were high cholesterol, arterial hypertension, depression and diabetes, respectively (picture 01). There is still a portion of these individuals that presented multimorbidities. Table 2 shows that most servers use medicines on a continuous basis. Yet, most workers do not engage in any kind of physical activity, as well as heavy activity that requires intense physical exertion at work, and remains most of the day sitting down.

Table 1. Socio-demographic characteristics of workers from a Brazilian Public Higher Education Institution. Brazil, 2018 (n = 615)

Gender	Feminino	326	53%
	Masculino	287	47%
Age	Average	47(18±71) years	
	18-30 years	62	10%
	31-40 years	93	15%
	41-50 years	175	28%
	51 - 60 years	225	37%
Marital Status	> 60 years	60	10%
	Single	147	24%
	Married/ Stable union	365	59%
	Divorced	77	13%
Color/ Race	Widow/ Widower	26	4%
	White	480	78%
	Black	41	7%
	Brown/ Yellow	72	11%
Schoolarity	Elementary School	39	6%
	High School	234	38%
	Higher Education	141	23%
	Postgraduate	145	24%
	Master/Doctoral Degree	44	7%
Monthly income	Mean	R\$4.722,00	
	Minimum	R\$976,00	
	Maximum	R\$30.000,00	

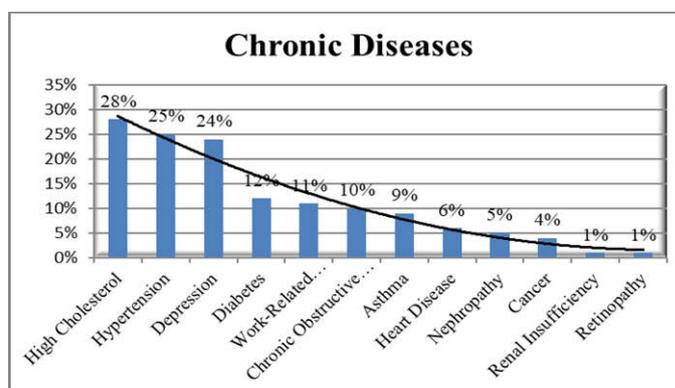


Table 2. Lifestyle and health condition of workers from a Brazilian Public Higher Education Institution. Brazil, 2018 (n = 615)

Medication usage	Yes	350	57%
	No	265	43%
Performs physical activity	Yes	287	47%
	No	328	53%
Spends excessive time sitting down	Yes	330	54%
	No	285	46%
At work, does heavy housework, carries weight, or does other heavy activity that requires intense physical exertion	Yes	142	23%
	No	473	77%
Pain or discomfort in the chest when climbing a ladder or a flight of stairs	Yes	107	17%
	No	508	83%
History of weight changes	Overweight	232	38%
	Innutrition	22	4%
	No	361	59%
Feels pain	Yes	364	59%
	No	251	41%
Intensity of pain	Low	67	11%
	Moderate	191	31%
	High	99	16%
Smokes	Yes	87	14%
	No	528	86%
Physical dependence on tobacco	High	9	10%
	Mean	10	11%
	Low	20	23%
	Very low	48	55%
Alcohol Dependence	Low risk	613	99,7%
	Mean risk	02	0,3%
Selfperception	Positive	431	70%
	Negative	184	30%

Of these, 17% have pain or discomfort when climbing a slope or ladder, and 38% have a history of overweight. Still, 14% are smokers, with low dependence, mostly. Regarding to alcohol usage, although 45% (n = 276) of the workers reported drinking alcoholic beverages, only 02 (0.3%) presented a medium risk for problems related to alcohol usage. In addition, the majority report pain, with moderate intensity, being mainly in the lower back.

DISCUSSION

The sociodemographic profile found among the workers from the investigated HEI assemble to studies of the literature to similar public, formed by women mostly, aged over 40 years, married, white, with high school and with good income conditions. (MACHADO, 2015). The study by Malta et al. (2017), which deals with noncommunicable chronic diseases, found that women presented a high frequency of comorbidities, used health services more regularly, both for promotion and prevention and curative actions (MALTA, 2017). On the other hand, low adherence to services and actions offered in the field of health by males, has an impact on high morbidity and mortality rates due to NCDS and lower life expectancy (BIDINOTTO, SIMONETTI, BOCCHI, 2016). In this way special attention should be given to the particularities of health of each gender. In relation to schoolarity and income, the majority has a university degree and favorable social conditions, a fact that provides better knowledge and access to health conditions. NCDS affect the different social classes differently, being more prevalent among individuals classified as low income and schooling, because they are more vulnerable, exposed to risks and difficulties related to access to health services in the most varied modalities (LOUVISON, LEBRÃO, DUARTE, SANTOS, MALIK, ALMEIDA, 2008; MALTA, 2017). However, despite the presence of protective factors for NCDS, a significant number of workers with these diseases were found. Among the most frequent diseases are high cholesterol, systemic arterial hypertension and diabetes, diseases of higher prevalence in the Brazilian population (BARROS, 2016). These diseases are associated to poor eating habits, lifestyle, daily stress, family history (PONTES, MEIRELES MACHADO, 2018; PIMENTA, ASSUNÇÃO, 2016) and, as the age increases (JEREZ-ROIG, 2016), to potential for triggering serious cardiovascular morbidities, among other important complications in the body, which result in significant loss of quality of life. Thus, for an effective control of these diseases, it is often necessary to adapt to diet, regular practice of physical activity, concomitant with the medications usage.

Depression presented a high prevalence among interviewed workers, a condition that requires managers' special attention, since it is a disease that gives the individual a series of symptoms, from psychological to physical, such as fluctuation in the way of visualizing life, depressed mood, fatigue, loss of interest in daily activities, decreased ability to think, concentrate or make decisions, sleep disorders, among others (COSTA, SOUSA, MIRANDA, MEDEIROS, UCHIDA, 2017) and consequently better work performance and quality of life. Elevated rates of NCDS among investigated servers have an impact on the frequent usage of continuous medications found. For Pucci (2012), the correct usage of medicines is capable of preventing long-term consequences such as target organ damage, functional loss and death. The prevention of these diseases are strategies required to confront

the NCDS, considered a public health problem worldwide (SILVA, COTTA, ROSA, 2013). As seen, medicine treatment makes it possible to control the evolution of diseases, reduce mortality and improve the quality of life of the patients, however, this modality of treatment must be associated to the change of life habits, such as healthy eating and exercise routine. (COELHO, BURINI, 2015). Positive impacts of physical exercise on the development of cardiovascular diseases are reported (ALENCAR, 2016). According to Cichocki (2017), the benefits offered by the practice of physical activities are incomparable, one has the reduction of cholesterol, triglycerides and control of blood pressure (CICHOCKI, FERNANDES, ALVES, GOMES, 2017). According to the American College of Sports Medicine and the American Heart Association, healthy individuals are advised to perform moderate physical activity for at least 30 minutes for five days a week, or 20 minutes of intense activity for three days a week to promote and maintain health (CICHOCKI, FERNANDES, ALVES, GOMES, 2017). Although widely recognized as the benefits of adopting routine physical practices in the prevention and reduction of health conditions (WORLD HEALTH ORGANIZATION, 2010; SOUSA, 2019), most workers evaluated do not perform physical activity on a regular basis, a condition that the significant number of subjects with chronic diseases. In addition, the absence of physical activity can have repercussions in pain, a condition widely reported by workers. The presence of pain in the spine, upper and lower limbs, and the relationship to physical exercises may be closely related to the time that the workers spend sitting down. In this sense, the institution has been offering practice of activities during work, such as work and physical therapy, for the most aggravated conditions of algeias. However, for the success of actions and transformations of activity as a routine in individuals' lives, stimuli are required to participate in actions, in addition to planning the expansion of actions with related foci.

However, this dependence, currently classified as a chronic disease and a public health problem, deserves special attention (WHO, 2013) because it represents a of the leading causes of preventable deaths worldwide (WHO, 2013). In Brazil, the National Program for Tobacco Control, offered by the Unified Health System (SUS), aims at reducing the prevalence of smoking and morbidity and mortality related to tobacco consumption (HM, 2015). Therefore, the insertion of workers in groups focused on smoking control is of extreme importance, aiming at positive repercussions on the quality of life and, consequently, a better performance in the workplace. The quality of life at work can be linked to the work day, environment of the execution of the service, reflecting on the performance of each individual in their functions. In the investigated HEI, the workers have a project aimed at supporting the person who manifests the desire to stop smoking. In the proposal, teachers and students enrolled in courses in the health area propose pharmacological and non-pharmacological measures to assist in the reduction or abandonment of dependence, focusing on the health of the participants, offering psychological support and strategies for reducing tobacco usage. The alcoholic beverage intake was also thematic evaluated, being present, its social usage in the majority of the participants. Currently, the rates of alcohol addiction are constantly increasing, contributing to make it a serious public health problem (MANGUEIRA, 2014). There are many negative effects of this practice, especially when the consumption is excessive (> 2 doses (250 ml), among which

the following stand out: family, professional and social conflicts for individuals and the community, change in income in the (ZOTESSO, PAIVA, MARQUES, 2018). Continuing this bias, it is imperative that educational actions, and subsidies to support the treatment of individuals who demonstrate problems with exacerbated alcohol consumption, are frequently announced and performed. Self-perception in health is an important contributing factor for the evaluation of individuals' health (JYLHA, 2009; DESALVO, MUNTNER, 2011). In the present study, 30% of the investigated workers reported perceiving their own health as bad or terrible. Negative self-perception of health is a predictor factor for triggering several health problems, besides contributing directly to the professional performance of individuals. Throughout the age, the health problems become more evident leading to a negative self-perception. In addition, it is important to plan a care that aims at a better quality of life for workers (JEREZ-ROIG et al., 2016).

Conclusion

Face to the results, it is possible to observe a high prevalence of chronic non-communicable diseases, sedentary lifestyle and usage of alcohol and tobacco. In this bias, it is important to target the investigated servers to individual and collective health care programs, advocating prevention to reduce future comorbidities, as well as to qualify their work process. Based on the discussions, it is possible to perceive the importance of deepening the variables studied in the present study, considering more incisively the subjective issues related to the health and well-being of university agents. In this sense, as a suggestion for studies to a similar population, it is worth noting the qualitative research that deepens the understanding of these aspects, with a view to subsidize more assertive health interventions.

REFERENCES

- Alencar MCN 2016. Atividade física amiga do peito. Available online at: [file:///E:/Arquivos%20do%20Usu%C3%A1rio/Downloads/Atividade%20F%C3%ADsica%20\(1\).pdf](file:///E:/Arquivos%20do%20Usu%C3%A1rio/Downloads/Atividade%20F%C3%ADsica%20(1).pdf)
- Barros R 2016. Vigitel Brasil, 2016. Available online at: <http://portalarquivos.saude.gov.br/images/pdf/2017/abril/17/Vigitel.pdf>
- Bidinotto DNPB, Simonetti JP, Bocchi SCM, 2016. A saúde do homem: doenças crônicas não transmissíveis e vulnerabilidade social. Available online at: http://www.scielo.br/pdf/rlae/v24/pt_0104-1169-rlae-24-02756.pdf
- Brasil. Ministério da Educação. Portaria Interministerial nº 1.000 de 15 de abril de 2004. Dispõe sobre a certificação de unidades hospitalares como Hospitais de Ensino. Diário Oficial da União. Available online at: http://bvsmms.saude.gov.br/bvsmms/saudelegis/gm/2007/pri2400_02_10_2007.html
- Brasil. Portaria nº 1.823, de 23 de agosto de 2012. Institui a Política Nacional de Saúde do Trabalhador e da Trabalhadora. Available online at: http://bvsmms.saude.gov.br/bvsmms/saudelegis/gm/2012/prt1823_23_08_2012.html
- Cichocki M, Fernandes KP, Alves DCC, Gomes MVM . 2017. Atividade física e modulação do risco cardiovascular. Available online at: <http://www.scielo.br/pdf/rbme/v23n1/1517-8692-rbme-23-01-00021.pdf>
- Cichocki M, Fernandes KP, Alves DCC, Gomes MVM. 2017. Atividade física e modulação do risco cardiovascular. Available online at: <http://www.scielo.br/pdf/rbme/v23n1/1517-8692-rbme-23-01-00021.pdf>
- Coelho CF, Burini RC. 2009. Atividade física para prevenção e tratamento das doenças crônicas não transmissíveis e da incapacidade funcional. Available online at: <http://www.scielo.br/pdf/rn/v22n6/v22n6a15.pdf>
- Costa TS, Sousa MNA, Miranda FAN, Medeiros RC, Uchida RR 2017. Intensidade E Sintomas Depressivos Em Usuários Da Estratégia Saúde Da Família. Available online at: <https://periodicos.set.edu.br/index.php/saude/article/view/3521/pdf>
- Desalvo KB, Muntner P 2011. Discordance between physician and patient self-rated health and all-cause mortality. Available online at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3179188/>
- Filho LGC, Júnior AP 2004. LER / DORT : multifatorialidade etiológica e modelos explicativos. Available online at: <http://www.scielo.br/pdf/icse/v8n14/v8n14a08.pdf>
- IBGE, 2013. Pesquisa Nacional de Saúde. Available online at: <https://biblioteca.ibge.gov.br/visualizacao/livros/liv94074.pdf>
- Jerez-Roig J, Souza DLB, Andrade FLJP, Filho BFL, Medeiros RJ, Oliveira NPD, Neto SMC, Lima KC 2016. Autopercepção da saúde em idosos institucionalizados. Available online at: <http://www.scielo.br/pdf/csc/v21n11/1413-8123-csc-21-11-3367.pdf>
- Lotufo PA, Olmos RD 2013. Epidemiologia da hipertensão arterial no Brasil e no mundo. Available online at: <http://departamentos.cardiol.br/dha/revista/9-1/006.pdf>
- Louvison MCP, Lebrão ML, Duarte YAO, Santos JLF, Malik AM, Almeida ES. 2008. Desigualdades no uso e acesso aos serviços de saúde entre idosos do município de São Paulo. Available online at: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-89102008000400021
- Machado MH, Filho WA, Lacerda WF, Oliveira E, Lemos W, Wermelinger M, Vieira M, Santos MR, Junior PBS, Justino E, Barbosa C. 2015. Características geria da enfermagem: O perfil sociodemográfico. Available online at: <http://revista.cofen.gov.br/index.php/enfermagem/article/view/686/296>
- Malta DC, Bernal RTI, Lima MG, Araújo SSC, Silva MMA, Freitas MIF, Barros MBA. 2017. Doenças crônicas não transmissíveis e a utilização de serviços de saúde: análise da Pesquisa Nacional de Saúde no Brasil. Available online at: http://www.rsp.fsp.usp.br/wp-content/uploads/articles_xml/0034-8910-rsp-S1518-87872017051000090/0034-8910-rsp-S1518-87872017051000090-pt.x83745.pdf
- Mangueira SO, Guimarães FJ, Mangueira JO. 2014. Promoção da saúde e Políticas Públicas do álcool no Brasil: Revisão integrativa da literatura. Available online at: <http://www.scielo.br/pdf/psoc/v27n1/1807-0310-psoc-27-01-00157.pdf>
- Organization WH. 2010. Global Recommendations on Physical Activity for Health. Available online at: <https://www.who.int/dietphysicalactivity/global-PA-recs-2010.pdf>
- Organization WH. 2013. Who report on the global tobacco epidemic, 2013. Available online at: https://apps.who.int/iris/bitstream/handle/10665/85380/9789241505871_eng.pdf;jsessionid=8BAEFE628A2A77B55812225B4111AAFA?sequence=1
- Pimenta AM, Assunção AA. 2016. Estresse no trabalho e hipertensão arterial em profissionais de enfermagem da rede municipal de saúde de Belo Horizonte, Minas Gerais,

- Brasil. Available online at: <http://www.scielo.br/pdf/rbso/v41/2317-6369-rbso-41-e6.pdf>
- PNAD, 2015. Pesquisa Nacional por Amostra de Domicílios. <https://biblioteca.ibge.gov.br/visualizacao/livros/liv98887.pdf>
- Pontes E, Meireles L, Machado ARJ. 2018. Componentes da síndrome metabólica e fatores associados em adolescentes: estudo caso-controle. Available online at: https://www.amrigs.org.br/revista/60-02/10_1598_Revista%20AMRIGS.PDF
- Pucci N, Pereira MR, Vinholes DB, Pucci P, Campos ND. 2012. Conhecimento sobre Hipertensão Arterial Sistêmica e Adesão ao Tratamento Anti-Hipertensivo em Idosos. Available online at: <http://www.onlineijcs.org/english/sumario/25/pdf/v25n4a09.pdf>
- Saúde M. 2006. Cadernos de atenção básica. Available online at: http://bvsm.s.saude.gov.br/bvs/publicacoes/diabetes_mellitus_cab16.pdf
- Saúde M. 2015. Estratégias para o cuidado da pessoa com doença crônica: O cuidado da pessoa tabagista. Available online at: http://189.28.128.100/dab/docs/portaldab/publicacoes/caderno_40.pdf
- Silva LS, Cotta RMM, Rosa COB. 2013. Estratégias de promoção da saúde e prevenção primária para enfrentamento das doenças crônicas: revisão sistemática. Available online at: <https://www.scielosp.org/pdf/rpsp/2013.v34n5/343-350/pt>
- Zotesco MC, Paiva SMA, Marques LO. 2018. Consumo, dependência e caracterização de usuários de álcool em um centro de atenção psicossocial de álcool e drogas. Available online at: <http://periodicos.uniarp.edu.br/ries/article/view/1477/824>
- Jylha M. 2009. What is self-rated health and why does it predict mortality? Towards a unified conceptual model. Available online at: <https://www.ncbi.nlm.nih.gov/pubmed/19520474>
