



Journal of Nursing

Revista de Enfermagem

UFPE On Line

ISSN: 1981-8963

ORIGINAL ARTICLE

CHRONIC ASPECTS OF PUBLIC SERVANTS WITH A FOCUS ON THE PROBLEMS OF VARICOSE VEINS AND HIGH CHOLESTEROL

ASPECTOS CRÔNICOS DE SERVIDORES PÚBLICOS COM FOCO NOS PROBLEMAS DE VARIZES E COLESTEROL ELEVADO

ASPECTOS CRÓNICOS DE SERVIDORES PÚBLICOS CON FOCO EN LOS PROBLEMAS DE VARICES Y COLESTEROL ALTO

Maria Josély de Figueiredo Gomes¹, Roberta Keile Gomes de Sousa Manso², Valéria Regina Carvalho de Oliveira³, Augusto André Santos de Souza⁴, Cintia Gouveia Costa⁵, Fernando Henrique da Silva⁶.

ABSTRACT

Objective: to describe the chronic-degenerative health aspects of the public servants of the IFRN, as well as, to infer sociodemographic variables with the most significant variables: having varicose veins and high cholesterol. **Method:** quantitative, descriptive study using, the closed questionnaire, as instrument. The sample was 774 participants. Descriptive and inferential statistical analyzes were performed, considering the quantitative responses that claim to have varicose veins or high cholesterol. **Results:** the most significant chronic degenerative problems pointed out by the servers, are varicose veins, high cholesterol and triglycerides, hypertension and diabetes. Women over 35 who have postgraduate and companion, are the ones with the greatest problems of varicose veins. Servers over 35, who work in the campuses of Grande Natal and have a partner, have high cholesterol. **Conclusion:** it is suggested that the health care projects of the servers consider these parameters as a reference to implement their actions. **Descriptors:** Health Promotion, Varicose Veins, Cholesterol.

RESUMO

Objetivo: descrever aspectos de saúde crônico-degenerativos dos servidores públicos do IFRN, como, também, inferir as variáveis sociodemográficas com as variáveis mais expressivas: ter varizes e colesterol alto. **Método:** estudo quantitativo, descritivo, empregando, como instrumento, o questionário fechado. A amostra observada foi de 774 participantes. Foram realizadas análises estatísticas descritivas e inferenciais, considerando-se o quantitativo de respostas que afirmam ter varizes ou colesterol alto. **Resultados:** os problemas crônicos degenerativos mais expressivos, apontados pelos servidores, são varizes, colesterol e triglicérides elevados, hipertensão e diabetes. As mulheres acima de 35 anos, que têm pós-graduação e companheiro, são as com maiores problemas de varizes. Os servidores acima de 35 anos, que trabalham nos campi da Grande Natal e têm companheiro, apresentam colesterol elevado. **Conclusão:** sugere-se que os projetos de atenção à saúde dos servidores considerem esses parâmetros como referência para implementar suas ações. **Descritores:** Promoção da Saúde; Varizes; Colesterol.

RESUMEN

Objetivo: describir aspectos de salud crónica-degenerativos de los funcionarios públicos del IFRN, así como, también, inferir las variables sociodemográficas con las variables más expresivas: tener varices y colesterol alto. **Método:** estudio cuantitativo, descriptivo, empleando, como instrumento, el cuestionario cerrado. La muestra observada fue de 774 participantes. Se realizaron análisis estadísticos descriptivos e inferenciales, considerando el cuantitativo de respuestas que afirman tener varices o colesterol alto. **Resultados:** los problemas crónicos degenerativos más expresivos, señalados por los servidores, son varices, colesterol y triglicéridos elevados, hipertensión y diabetes. Las mujeres mayores de 35 años, que tienen posgrado y compañero, son las que tienen problemas de varices. Los servidores de más de 35 años, que trabajan en los campus de la gran Natal y tienen compañero, presentan un colesterol alto. **Conclusión:** se sugiere que los proyectos de atención a la salud de los servidores consideren estos parámetros como referencia para implementar sus acciones. **Descritores:** Promoción de la Salud; Varices; Colesterol.

¹Professional of Physical Education, Professor, PhD, Federal Institute of Education, Science and Technology of Rio Grande do Norte / IFRN. Natal (RN), Brazil. E-mail: josely.gomes@ifrn.edu.br; ²Nurse, Master's student, Federal Institute of Education, Science and Technology of Rio Grande do Norte / IFRN. Natal (RN), Brazil. E-mail: roberta.sousa@ifrn.edu.br; ³Social Worker, Master, Federal Institute of Education, Science and Technology of Rio Grande do Norte / IFRN. Natal (RN), Brazil. E-mail: valeria.carvalho@ifrn.edu.br; ⁴Work Safety Engineer, Specialist, Federal Institute of Education, Science and Technology of Rio Grande do Norte / IFRN. Natal (RN), Brazil. E-mail: augusto.souza@ifrn.edu.br; ⁵Psychologist, Master, Federal Institute of Education, Science and Technology of Rio Grande do Norte / IFRN. Natal (RN), Brazil. E-mail: cintia.costa@ifrn.edu.br; ⁶Professional of Physical Education, Federal Institute of Education, Science and Technology of Rio Grande do Norte / IFRN. Natal (RN), Brazil. E-mail: fernando.henrique@ifrn.edu.br

INTRODUCTION

The term worker health refers to a new way of understanding the health-work relationship and proposes a differentiated form of attention to workers' health and intervention in work environments.¹ In this context, this research seeks to understand which aspects of the health of the IFRN's servants are the focus of possible interventions, aiming at reducing the health problems.

In this sense, it is understood that it is possible to develop, institutionally, actions aimed at the health of the worker that can encompass the formulation and the implementation of health protection policies, seeking to reduce occupational diseases and improve the quality of life of the employees. Based on this conception, the research instrument, was applied, through a closed questionnaire, to evaluate health aspects, and, for this work, the variables related to cardiocirculatory problems were considered, specifically, with a focus on the most expressive (varicose veins and high cholesterol).

Based on the analysis of the answers obtained, a diagnosis was made that highlighted the analyzes and their aspects per campus and, position and therefore, the data were presented and sent to said campuses, in the face of guidelines and suggestions for the creation of Health Promotion Projects, with the purpose, pursuant to Article 4 of Regulatory Ordinance No. 3, dated March 25, 2013,² aimed at improving the environments, organization and work process, in order to increase awareness, responsibility and autonomy of the servants, in harmony with the governmental efforts of constructing a culture of valorization of the health to reduce morbimortality, by means of healthy habits of life and work.

This study is, therefore, a clipping of a larger study and aimed to describe the chronic-degenerative health aspects of the IFRN servers, as well as to infer sociodemographic variables with the most significant variables: having varicose veins and high cholesterol. These diagnostic data are of great importance in order to intervene properly, focusing on the most expressive demands.

Thus, it is important to consider the increasing valuation of personal factors, such as sedentary lifestyle, smoking and diet in determining cardiovascular diseases, and to consider the risk factors present in the current or previous occupational activity of

the patients / employees, since the increase of the acute and chronic disorders of the cardiocirculatory system in the population causes that the relations of diseases with the work deserve more attention, considering also that the work of the public servants is part of the daily life of the citizens and is of paramount importance for the institution and for the economy of today's society.

OBJECTIVE

- To describe degenerative chronic health aspects of IFRN public servants, as well as, to infer sociodemographic variables with the most expressive variables: to have varicose veins and high cholesterol.

METHOD

Quantitative, descriptive study,³⁻⁴ with all the servers of the Federal Institute of Science and Technology Education of Rio Grande do Norte (IFRN): 2,786, administrative-technicians, effective teachers, substitute teachers, trainees and outsourced workers, all of whom are active in the Institute, at least six months ago.

The research sample was defined from proportional sampling by position and campus, considering that we worked with a heterogeneous population. For this, an observed sample of 774 (seven hundred and seventy-four) was taken, as the basis. Such representativity is the most reliable to be used in this type of research, since it presents a level of confidence of 95% and a sampling error of 5%.

The data of this research were collected through a questionnaire elaborated in the electronic tool Google Docs. The questionnaire *link* was made available through the institutional e-mail to all the IFRN servers between November 2013 and March 2014. Subsequently, a complementary collection was carried out for three months (from March to May 2014) to meet the required sample on campus work and charge.

Before visualizing the research instruments, the respondents confirmed that they were in accordance with the Informed Consent Form (ICF). The project was approved by the Ethics and Research Committee, according to Resolution 196/96 of the National Health Council (NHC), on September 27, 2013.

In order to reach the objectives proposed in this research, the research instrument was applied closed questionnaire of the health aspects, and, for that work, were considered, specifically, the variables related to cardiocirculatory problems, with a focus on

the most expressive (varicose veins and high cholesterol).

The data, with the application of the questionnaire, were submitted to statistical analyzes of the SPSS Program 21. Descriptive and inferential statistical analyzes were performed.

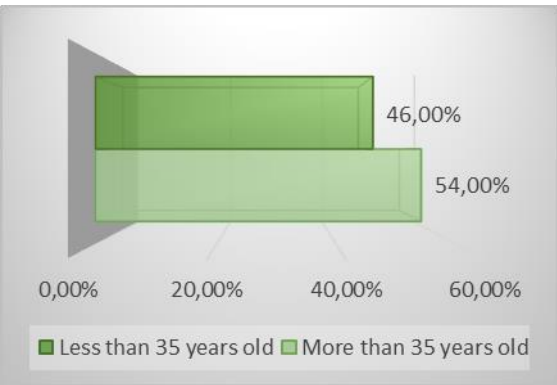
RESULTS

Table 1. Degenerative Health / Chronic Characteristics of IFRN Servers. Natal Na Brazil, 2013.

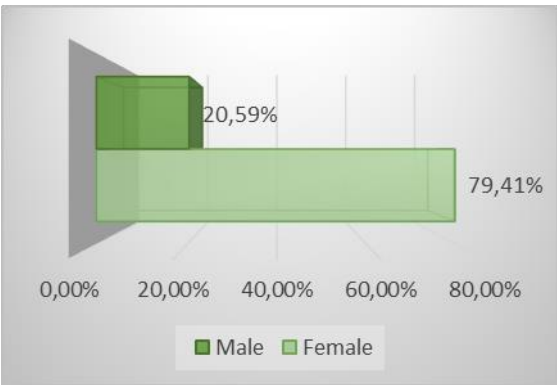
Health characteristics	n	%	N (Total)
Varicose veins	102	13.2	774
Cholesterol	90	11.6	774
Hypertension	70	9	774
Triglyceride	68	8.8	774
Diabetes	13	1.7	774
Heart problems	7	0.9	774
Hypothyroidism	6	0.8	774
Cancer	1	0.1	774
Thrombosis	1	0.1	774

In the next step of this work, an inferential analysis was made between the dimension having varices and the sociodemographic

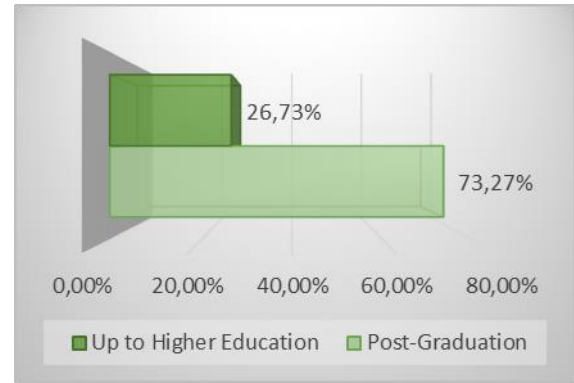
variables. It was considered the number of servers that claim to have problems with varicose veins.



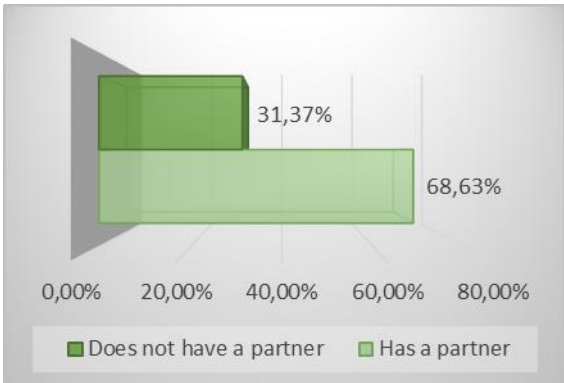
a) Varicose Veins x Gender



c) Varicose Veins x Age



b) Varicose Veins x Education



d) Varicose Veins x Marital Status

Figure 1. Crossing between varices and: a) Gender; b) Schooling; c) Age; d) Civil Status. Natal (RN), Brazil, 2013.

As a last step, an inferential analysis was performed between the high cholesterol dimension and the sociodemographic variables (Figure 2). It was considered the quantitative of servers that claim to have high cholesterol,

except in the case of the function, where it was considered the quantity of servers per position that have high cholesterol (direction, function and does not have).

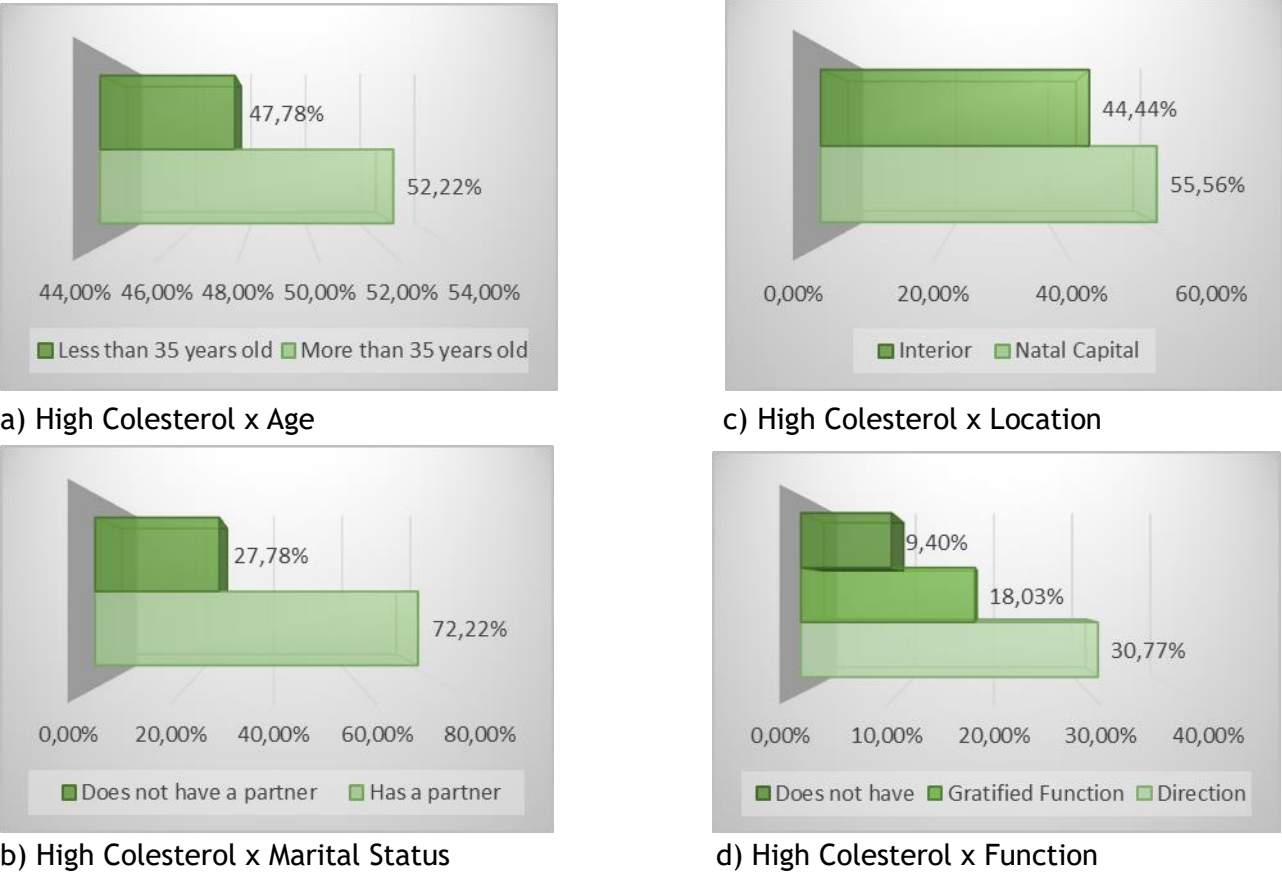


Figure 2. Crossing between High Cholesterol and: a) Age; b) Civil Status; c) Location; d) Function. Natal (RN), Brazil, 2013.

DISCUSSION

As can be seen, from the results found in table 1 (Health / Chronic Degenerative Characteristics of IFRN Servants), highlighted, in the previous topic, the chronic-degenerative diseases have been replacing infectious diseases among adults and the elderly, they are considered a public health problem, since they are of long duration and accumulate in individuals, considering the relative increase of the proportion of elderly people and the increasing tendency of life expectancy.⁵

The incidence of coronary artery disease, in industrialized countries, has epidemic characteristics and its occurrence has been increasing progressively in developing countries, as in Brazil.⁶

High cholesterol, although not a disease, greatly increases the risk of developing cardiovascular disease. Therefore, it is considered a primary problem, which must be controlled in a preventive way, considering all of the aforementioned diseases.

Although, in the questionnaire, it did not ask the typology of varicose veins, it is known that primary varicose veins of the lower limbs are one of the most frequent affections in patients seeking outpatient medical care for vascular surgery.⁷ The main complaints are aesthetic problems, pain, edema, feeling of heaviness, cramps and pruritus.⁸

In view of the considerations pointed out by the IFRN staff, it is important to emphasize

that those in the first four placements are closely related to cardiocirculatory diseases and should therefore be taken into account in the health-related projects of the IFRN server.

In continuity to the research, and when performing the inferential statistics, that relate to have varicose veins with the genus, was proven, based on figure 1, (Cross between Varices and: a) Gender; b) Schooling; City; d) Marital Status), that Chi squared is highly significant ($\chi^2 = 73,519$; $gl = 1$, asymptotic $\sigma = ,000$), and the size of the relation measured by the contingency coefficient is 0.295. The women said they had more problems with varicose veins.

When inferential statistics, relating to having varicose veins with age, it was verified that Chi square is significant ($\chi^2 = 9,788$, $gl = 1$, asymptotic $\sigma = ,002$), and the size of the relation measured by the contingency coefficient is 0.112. Servers over 35 claim to have more varicose veins problems. The age group that claims to have the most problems with varicose veins is from 36 to 45 years old, with 22.65%, and, secondly, from 46 to 55 years old, with 11.46%.

When inferential statistics, relating to having varicose veins with schooling, were verified, square Chi is significant ($\chi^2 = 3.184$, $gl = 1$, asymptotic $\sigma = ,045$), and the size of the relation measured by the contingency coefficient is 0.064. The servers with graduate studies are those who claim to have major varicose veins problems. The group of servers with Post-doctorate are those that claim to

present a greater problem of varicose veins (28.57%), followed by servers with elementary education II, with 20%, and Master, with 15.92%.

When performing the inferential statistics that relate to have varicose veins with the marital status, it has been verified that Chi squared is significant ($\chi^2 = 8.287$, $gl = 1$, asymptotic sigma =, 004), and the size of the relation measured by the contingency coefficient is 0.004. Servants who are married or have a stable union are those who claim to have a higher varicose veins problem. Considering the number of servants in situations: single, married / stable, separated, divorced and widowed partner, it can be stated that: widowers report greater varicose veins problems, with 50%, even though the sample is only two servers. In second, the divorced, with 20% and, in third, with married couples with 16.32%.

When performing the inferential statistics, that relate to having high cholesterol with age, was demonstrated, in figure 2, (Crossing between High Cholesterol and a) Age; b) Civil Status; c) Capacity; d) Function), that square Chi is significant ($\chi^2 = 3,646$, $gl = 1$, asymptotic sigma =, 036), and the size of the relation measured by the contingency coefficient is 0.092. Servers over 35 are those who claim to have the highest cholesterol. Considering the number of servers in the age groups, it can be stated that servers aged between 46 and 55 years are the most expressive range, where 17.7% of the servers claim to have high cholesterol, and, secondly, there is the range between 36 and 45 years, with 14.92%.

When the inferential statistic, relating high cholesterol to marital status, was verified, Chi square is significant ($\chi^2 = 3.646$, $gl = 1$, asymptotic sigma =, 000), and the size of the relation measured by the contingency coefficient is 0.001. Servants who have a sentimental partner claim to have the highest cholesterol compared to those who are not married, nor do they have a sentimental partner. Considering the number of servants in situations: single, married / stable, separated, divorced and widowed partner, it can be stated that married couples (15.15%) and divorced couples (11.43%) present more expressive data.

When the inferential statistic, relating high cholesterol to the stocking *campus* was verified, Chi square is significant ($\chi^2 = 6.567$, $gl = 1$, asymptotic = .008), and the size of the relation measured by the contingency coefficient is of 0.56. Servers of the Great Christmas claim to have cholesterol higher

than those sold in the interior of the State, and that may be related to age, since the campuses in the interior are younger. Considering the number of servers per stockpile, it is possible to say that the most expressive campuses in this inference are: North Zone (25.58%), Mossoró (19.6%), Pau dos Ferreros (16.22%) and Central Natal (14.57%).

When the inferential statistic, relating high cholesterol to the server function, was verified, Chi square is highly significant ($\chi^2 = 21,619$, $gl = 3$, asymptotic sigma =, 000), and the size of the relation measured by the contingency coefficient is 0.168. In this inference, was considered the number of servers per function, therefore, there is a relation of having management position (30.77%) and gratified function (18,03) with high cholesterol. And a hypothesis is the level of stress to which the servers that assume this function are submitted.

CONCLUSION

Chronic degenerative problems are among the main problems of mortality and morbidity in Brazil; the most expressive ones, pointed out by the IFRN servers, are varicose veins, high cholesterol, hypertension, high triglycerides and diabetes.

With regard to the problems of varicose veins, women over 35 years old, graduate students and those with a partner are those who claim to have more problems. With regard to cholesterol, it can be said that there are more problems with servers over 35 years old, who have a sentimental partner, from the Campi da Natal and with a management position.

Although high cholesterol is not a disease, it is a parameter widely used to evaluate the possibilities of various cardiovascular diseases. With this work, IFRN is suggested to pay special attention to women's health, since they are the most affected by varicose veins, and to the servants who have management positions, in the age group of 46 to 55 years and that are crowded in the campuses older.

It is suggested that the health care projects of the servers consider these parameters as a reference when implementing their actions.

FUNDING

The research was funded by the Federal Institute of Education, Science and Technology of Rio Grande do Norte - IFRN, without reservation of specific heading.

ACKNOWLEDGEMENTS

We thank the servers that made themselves available to participate in the IFRN survey.

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Submission: 2016/12/13

Accepted: 2017/09/22

Publishing: 2017/10/15

Corresponding Address

Maria Josély de Figueiredo Gomes
Instituto Federal de Educação, Ciência e Tecnologia do Rio Grande do Norte/IFRN
Campus Natal Cidade Alta
Av. Rio Branco, 743
Bairro: Cidade Alta
CEP: 59025-003 – Natal (RN), Brazil