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RESEARCH

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## QUALITY OF LIFE AND WELL-BEING OF COLLEGE UNIVERSITY WORKERS

Qualidade de vida e bem-estar de trabalhadores de colégio universitário

Calidad de vida y bienestar de trabajadores universitarios

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#### **ABSTRACT**

**Objective:** To know factors related to the quality of life and health of workers at a university college. **Methods:** quantitative research, carried out by means of an epidemiological survey, using a self-administered questionnaire and clinical data. **Results:** 106 workers participated in the research, 74.5% female, with a mean age of 38 years (SD  $\pm$  12.4), where 92.5% reported not smoking and 58.5% not drinking alcohol; 50.9% said they were sedentary. Clinical data showed that 44.9% had abnormal blood pressure and 11.3% high blood glucose. In the analysis of the stress exposure quadrants, active work allocated a greater number of professionals (50%) and the suspicion of common mental disorder among workers was 22.6%. In the bivariate analysis, an association was observed between being single and active work (p = 0.040). **Conclusion:** it is observed that there is a predominance of median degree of stress at work and unhealthy lifestyle habits. It is known that these findings contribute to a greater occurrence of health problems.

**Descriptors:** Worker health, Quality of life, Mental health, Work stress.

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#### **RESUMO**

**Objetivo:** Conhecer fatores relacionados à qualidade de vida e saúde de trabalhadores de um colégio universitário. **Métodos:** pesquisa quantitativa, realizada por meio de inquérito epidemiológico, utilizando-se questionário autoaplicado e dados clínicos. **Resultados:** participaram da pesquisa 106 trabalhadores, 74,5% do sexo feminino, com média de idade de 38 anos (DP±12,4), onde 92,5% relataram não fumar e 58,5% não beber álcool; 50,9% afirmou ser sedentário. Os dados clínicos demonstraram que 44,9% apresentaram pressão alterada e 11,3% glicemia elevada. Na análise dos quadrantes de exposição ao estresse, o trabalho ativo alocou maior número de profissionais (50%) e a suspeição de transtorno mental comum entre os trabalhadores foi de 22,6%. Na análise bivariada, observou-se associação entre ser solteiro e trabalho ativo (p=0,040). **Conclusão:** observa-se que há predominância de grau mediano de estresse no trabalho e hábitos de vida pouco saudáveis. Sabe-se que esses achados contribuem para maior ocorrência de problemas de saúde.

Descritores: Saúde do trabalhador, Qualidade de vida, Saúde mental, Estresse laboral

#### **RESUMEN**

**Objetivo:** Conocer factores relacionados con calidad de vida y salud de trabajadores en un colegio universitario. **Métodos:** investigación cuantitativa, realizada mediante encuesta epidemiológica, utilizando cuestionario autoadministrado y datos clínicos. **Resultados:** 106 trabajadores participaron de la investigación, 74.5% mujeres, con edad media de 38 años (SD  $\pm$  12.4), donde 92.5% informaron no fumar y 58.5% no tomar alcohol; El 50,9% dijo que eran sedentarios. Los datos clínicos mostraron que el 44,9% tenía presión arterial anormal y el 11,3% de glucosa en sangre alta. En el análisis de los cuadrantes de exposición al estrés, el trabajo activo asignó un mayor número de profesionales (50%) y la sospecha de trastorno mental común entre los trabajadores fue del 22,6%. En el análisis bivariado, se observó asociación entre trabajo individual y trabajo activo (p = 0.040). **Conclusión:** se observa que hay un predominio del grado medio de estrés en trabajo y hábitos de vida poco saludables. Se sabe que estos hallazgos contribuyen a una mayor ocurrencia de problemas de salud.

**Descriptores:** Salud del trabajador, Calidad de vida, Salud mental, Estrés laboral.

## INTRODUCTION

Work interlinks the worker with the environment in which he/she lives, interfering in his/her health and in the dimensions of politics, society and the culture of the worker and his/her family, which guarantees the work, and all that is related to it, a prominent position in the discussions of all administrative spheres.<sup>1</sup>

The quality of life at work is perceived by employees and should involve safe conditions such as: job stability, adequate remuneration and benefits, competent supervision, feedback regarding their performance, growth and learning opportunities, possibility of promotion and a satisfactory social climate.<sup>2</sup>

Working in an environment of "pressure" from the supervisor or his colleagues, the lack of job security or even the risks of accidents at work are determining factors for the development of the problem, bringing consequences on individual, professional, family and social levels. There is an

influence of the work environment as the main condition for triggering syndromes, as burnout syndrome appears as one of the great current psychosocial problems.<sup>3</sup>

Therefore, the progress brought by the recognition of stress and depression as work-related illnesses directs attention to the relationship between the environment, (organization of the work space and type of work) and the influence of this dynamic on the health and well-being of the worker.<sup>4</sup>

It can then be understood that actions capable of identifying professional satisfaction and promoting quality of life at work are important not only from the worker's point of view, but also from that of employers.<sup>2</sup>

Through the above, this study aims at knowing factors related to the quality of life and health of teachers and professionals supporting a university college.

## **METHODS**

The research was done by means of an epidemiological inquiry. The collection occurred in the shortest time possible, because the logic of the analysis of these data ignores this time range. Thus, the first and last statements are analyzed as collected in the same instant. The typology of the study allows an overview of what happened in the population at a given time, considering those exposed and not exposed to stress and its consequences.

The collection instrument used was a self-administered questionnaire structured with open and closed questions applied by researchers who then collected the clinical data. The material contained sections organized by subject. Aspects related to sociodemographic characteristics, per capita income per minimum wage. The strata of the self-referred skin color variable are based on a classification proposed by the Brazilian Institute of Geography and Statistics.<sup>5</sup>

Regarding the labor aspect, the following variables were studied: professional category, type of employment relationship; working hours; weekly workload; number of jobs; sector of work and time of performance in the sector.

For the definition of the quadrants of exposure to stress at work, based on demand and control dimensions, the median found in the scores of the investigated dimensions was used. In the case of the demand dimension, it was defined as "lower demand" scores up to the average found, and "higher demand" scores above the average. The same procedure was adopted for the control dimension.

The common mental disorder dependent variable (CMD) was evaluated according to twenty closed questions that correspond to the reduced version of the Self Reporting Questionnaire (SRQ-20). The instrument, in its reduced version, has 20 questions validated by the World Health Organization in 1983. In this study, the cutoff point seven was adopted for suspicion of CMD, based on previous researches that used stipulated values in the validation of

the instrument.<sup>6,7</sup> Thus, professionals with scores greater than or equal to seven were considered suspect.

The chi-square test was used to verify differences between the groups analyzed during the bivariate analysis. The value  $p \le 0.05$  was considered in the significance evaluation. Each step of the data analysis process was performed using the Statistical Package for the Social Sciences version 21 (SPSS\*).

The study followed the resolution 466/2012 and has the approval of the ethics committee of the Medical School of the Universidade Federal Fluminense on October 10, 2017, under the number 2,324,524.

### **RESULTS**

A total of 106 workers from Colégio Universitário Geraldo Reis participated in the survey. Among the workers 64 (60.4%) declared themselves white; in relation to sex, 79 (74.5%) were women; the average age found was 38 years (SD±12.4), with 47 (44.3%) above. As for schooling, 57 (53.8%) had completed higher education. As for the civil state, 54 (50.9%) lived without partner (a); 54 (50.9%) did not have children (as); the average income per capita was between 4 and 5 minimum wages.

As for the professional category, 54 (50,9%) teachers and 52 (49,1%) support employees. The major of them had an employment bond (80,2%), were part of the permanent staff of the institution (58,5%), worked in integral shifts (84,9%), and the average time in the sector was 4 years (DP±5,7), with 74 (69,8%) professionals below this average. As for the time in the institution, the average was 5 years (SD±7.8), with 80 (75.5%) employees with time below this range and the average weekly workload found was 33h (SD±0.5%), with 63 (59.4%) subjects above this value. The majority of the workers 78 (73.6%) reported thinking about work during breaks.

About the life habits, 98 (92.5%) of the employees reported not to smoke; about the consumption of alcoholic beverage 62 (58.5%) declared not to consume; 54 (50.9%) of the workers do not practice physical exercise. As for food 56 (52.8%) consume from one to three times a week frying, 38 (35.8%) consume from one to three times a week industrialized products, 54 (50.9%) consume fruits daily and 60 (56.6%) consume vegetables daily.

Among the employees 47 (44.9%) presented altered pressure, 12 (11.3%) high blood glucose, 84 (79.2%) high body fat percentage, and according to the abdominal perimeter, 42 (39.6%) presented substantial risk, 27 (25.5%) risk, while only 37 (34.9%) presented ideal perimeter. According to the classification of Body Mass Index (BMI) 66 (62.3%) workers present overweight/obesity.

About self-reported stress, 65 (61.3%) professionals reported being a little stressed. In the dimension demand and control at work, 53 (50%) of the workers presented high demand and 63 (59.4%) high control. In the analysis

of the quadrants of exposure to stress at work, no worker presented high demand, which is the combination of high demand and low control. The active work quadrant allocated more professionals 53 (50%), the passive work quadrant allocated 41 (38.7%), while the low demand on work quadrant presented 12 (11.3%) of the workers.

In the bivariate analysis, between the variable stress and socio-demographic, labor and health aspects, it was observed association between being single and active work (p=0.040), having more than one employment bond and passive work (p=0.047). The suspicion of CMT among workers was 22.6%.

#### DISCUSSION

The predominant audience of the study was female. The teaching position is usually related to the high demand for work, this demand is seen as the demands of work that occur in the context of the psychological nature, time, speed, productivity and conflicts over charges.<sup>7</sup>

In the present study, it can be observed that most workers had high demand while control was also high. Therefore, they have a job that demands a lot of their psychological, but at the same time they have control over their work process. The stress at work is a result of the combination of high demand, low control and low social support by the team in the work environment.<sup>8</sup>

As for the degree of self-reported stress, most professionals said they were a little stressed. Stress can affect the level of integration of the teacher in the work environment, and can evolve into chronic stress, which can lead to pathological problems, such as burnout syndrome. This syndrome can cause the worker to partially or totally move away from his/her work functions.<sup>9</sup>

In addition, exposure to stress in the work environment can lead to the development of common mental disorders ( CMDs), which offer potential damage to health, especially mental suffering. The presence of CMD

With reference to the consumption of alcoholic beverages, 62 (58.5%) declared not to make use. In another study conducted with teachers by Correia and cols 73.30% of participants declared not to be consumers of alcoholic beverages. The consumption of alcohol increases blood pressure (BP), both in the short and long term, being considered a strong factor for the development of hypertension.<sup>12</sup>

Regarding eating habits, most of them said they consume industrialized products and fried foods one to three times during the week and consume fruits and vegetables daily. Sporadic or absent consumption of less healthy food is considered adequate and regular consumption (two or more times a week) is considered inadequate.

Most of the workers had a high abdominal perimeter. The measurement of abdominal circumference is a cardiovascular risk factor, since obesity, especially the abdominal, is associated with metabolic changes such as glucose intolerance or diabetes, dyslipidemias and hypertension.  $^{13}$ 

In the present study, it was verified that most workers did not practice physical activity and had a high BMI, the majority being classified as overweight/obesity. Similar results were found in the study of Moreira, Santino, and Tomaz, where 60.9% did not engage in physical activity and 65.2% of teachers were overweight/obesity.<sup>14</sup>

The absence of physical activity is responsible for approximately 2 million deaths worldwide, and annually it is responsible for 10% to 16% of cases of breast cancer, colon and diabetes and 22% of ischemic heart diseases. The practice of physical activity provides the increase of quality of life, acting in the prevention and reduction of hypertension, weight gain, promoting well-being and preventing stress, anxiety and depression.<sup>15</sup>

When analyzed the values of the percentage of body fat, it can be verified that more than half (79.2%) of the workers presented high percentage. The high level of body fat is associated with metabolic alterations harmful to health. <sup>16</sup>

Insufficient physical activity, high percentage of body fat and overweight are among the risk factors for the development of chronic non-communicable diseases (NCDs). The predominance of these risk factors ends up affecting people's quality of life, which consequently can interfere with work capacity.<sup>17</sup>

In a systematic review of literature on mental illness in Brazilian teachers it was shown that several researches have revealed rates of greater illness in primary and secondary school teachers. The research also shows that as the level of education rises, with the exception of university professors, the CMD indexes tend to increase, with the highest incidence in secondary school teachers.<sup>18</sup>

## **CONCLUSIONS**

Among the variables studied and analyzed, there is a predominance of the female gender, a median degree of stress at work and unhealthy living habits, highlighting the sedentary lifestyle and consumption of industrialized food products.

It is known that the results observed in the research, can contribute for the association between the previously mentioned variables and the greater occurrence of chronic diseases, as the alteration of the glycemia, high weight and systemic arterial hypertension previously verified in the group researched.

In addition, to these risky habits and lifestyles are added the mental overload and the degree of stress found among school workers. The mental disorders associated with the observed health conditions generate a significant impact on the quality of life and professional performance of individuals.

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