

## 118 - WORKER HEALTH: STUDY ASSOCIATIVE BETWEEN WORK SHIFT AND PREVALENCE OF DISEASE

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### INTRODUCTION

Occupational health is a field composed of practices and knowledge with theoretical-methodological approach, which according Lacaz (2007) seeks to understand and intervene in labor relations and health and disease. This relationship (Work / health-disease) on the idea of the body as a machine that is exposed to risks. Thus, the interaction of the body with agents / factors that exist in the work environment lead to health consequences thereof.

In 1986 the VIII National Health Conference, we consolidated the proposed creation of the Unified Health System (SUS) he was allied to the condition of "social rights and citizenship" among the actions, then the global trend of health of working was inserted (Parmegiani, 1985). The Sanitary Reform movement helped in the drafting of the SUS project that as the final report VIII National Health Conference of the Ministry of Health (1986) work in decent environment and knowledge are essential factors for the full year of access to health. Lacaz (2007 p.762) also notes that "the first National Conference on Occupational Health incorporated the SUS, which should include actions and bodies of Occupational Health, with health as a right, according to international trend of universal law "[emphasis original].

Wage labor is central activity in modern society, Dal Rosso (2006) states that the workday gained ground in the area of study and research as well as in social workers, besides being expressed by the duration component with respect to the amount of time-consuming work in people's lives. For Dal Rosso (2006) the workday has several implications and highlights three, the first states that affects the quality of life (interferes with ability to enjoy or not more free time, the second set the amount of time during which the people devote economic activities and ultimately establishes direct relationships between health, the type and duration of work performed.

Edington and Schultz (2007), van den Heuvel et al. (2007), in their studies claim that professions that demand high psychosocial demands such as teachers, doctors, firefighters and others who are professionals who care for the welfare of others, is the emergence of typical problems caused by the amount of work a since this requirement of these positions creates great stress, depression and dejection beyond all other evils related to this framework.

Given the above, the journey or workload seems to influence the disease process workers, thus, the study aimed to associate the workday with disease prevalence in teachers of a Higher Education Institution (HEI).

### METHODS

#### Characteristics of the study and ethical aspects

This research is characterized as descriptive transversal, as Thomas and Nelson (2002), as it seeks to observe, record, analyze, describe and correlate facts or phenomena. This study was approved by the Ethics Committee Opinion No. 517/2009 of the State University of Maringá. The inclusion of the participants was given freely by signing the Informed Consent Form (ICF) containing information about the project and its purpose, requesting authorization of subjects to the use of data in publications.

#### Subjects and instruments

The study was conducted with 145 teachers from a public HEI Paraná state, that after signing the (IC) subjects completed the questionnaire which contained semi-structured multiple-choice question to determine the shift (a) 4 to 6 hours b) for 6 to 8 hours and c) + 8 hours) on the prevalence of diseases the respondent could select (as) option (s) disease having a space to write a new one, if it was not listed. The diseases listed were: anemia, arthritis / rheumatism, high cholesterol, diabetes, kidney disease, gastritis / ulcer, stroke, cancer, stroke, depression, asthma / bronchitis / hipetensao and others. Weight and height were measured using a digital scale and a stadiometer fixed, as it was held calculate BMI (Body Mass Index) by the ratio of weight in kilograms by height in centimeters squared. The values were ranked in 3 categories:

BMI	VALUE
NORMO WEIGHT	18.5–24.9
OVERWEIGHT	25.0–29.9
OBESE	= 30.0

(WHO, 2000)

#### Data analysis

For the presentation and analysis of the data was initially applied the normality test, followed by Chi-square to associate the workday and prevalence of diseases and workday and Body Mass Index (BMI). Tables of frequencies and percentages were adopted for the various classifications. All data were analyzed with the help of Excel and the statistical package Statistical Package for Social Science (SPSS) version 13.0. Significance was set at 5% ( $P < 0.05$ ).

### RESULTS AND DISCUSSION

Table 01 - Association between shift work and disease prevalence in the faculty of Education Institution

P.D	4 a 6 HOURS		6 A 8 HOURS		MORE OF 8 HOURS		TOTAL	p
	n	f (%)	n	f (%)	n	f (%)	n	f (%)
0 OR 1	8	5,5	44	30,1	36	24,7	88	100
2 A 3	4	2,7	16	11,0	22	15,1	42	100 0,754
MORE OF 3	1	0,7	8	5,5	7	4,8	15	100
TOTAL	13	8,9	68	46,6	65	44,6	145	100

Chi Square -  $p \leq 0.05$  (not significant). (P. D) = prevalence of disease)

Regarding Table 01 it was revealed that the association between disease prevalence increased with a greater workload was not significant, however as the data show an independent association was not significant it is possible to notice that the number of teachers with up to 3 diseases in the working day more than 8 hours per day was higher than in other periods of work, a fact that is in agreement with the one presented by Dal Rosso (2006); Ceballos et al. (2011) show that when periods of higher workload is directly linked to the increased prevalence of diseases and Cebballos the same study also points out that among the complaints and possible reasons for the emergence of diseases among teachers is the lack of sufficient time to the rest, lots of time standing, the large amount of daily classes and the stress and routine of day-to-day of this class of servers. However, as stated Pryer (1997) when polls are conducted using questionnaires to identify personal problems or health, it is normal that there is an overestimation or omission of certain information so that individuals may appear stable or good condition of life, and this fact be an explanation of the association was not significant, because as already mentioned large workloads are strongly associated with the emergence of health ailments. According Edington and Schultz (2007), van den Heuvel et al. (2007); Alavinia et al. (2009) work functions or positions that require psychosocial great demand, ie, as in the case of the teacher who in addition to ensuring that the school still needs to deal with social relationships with students taking function to be an example, since this the level of someone who should be followed typically have larger income losses or casualties due to extended working hours.

Table 02 - Association between workday and Body Mass Index teachers in the Institution of Higher Education.

BMI	4 a 6 HOURS		6 A 8 HOURS		MORE OF 8 HOURS		TOTAL	p	
	n	f (%)	n	f (%)	n	f (%)	n		f (%)
EUTROPHIC	5	3,4	37	25,3	29	19,9	71	100	0,684
OVERWEIGHT	6	4,1	23	15,8	29	19,9	58	100	
OBESE	2	1,4	8	5,5	7	4,8	17	100	
TOTAL	13	8,9	68	46,6	65	44,6	146	100	

Chi Square -  $p \leq 0,05$  (not significant).

Table 02 shows data on the association between non-significant workload and BMI. According to that same table containing data representative was not possible to see that 76% of the sample (111 teachers) who work more than 7 hours per day are overweight or obese. This could be explained again using the ideas of Dal Rosso (2006) because it says that among the implications of the workday brings this decrease in free time, which for Cavallari and Zacharias (1994) is the free time what remains of the other times of day (and need vital obligations), this time the individual conducts recreational physical activity among them in order to have fun and entertain distracting, as already reported by Ceballos et al. (2011) a common complaint made by teachers beyond the daily stress fatigue is due to the great demand of labor, Fischer (2004) also points out that these features result in a common framework for increased fatigue, and the unwillingness to perform exercises is almost a constant.

### CONCLUSION

As already mentioned the load time of the working day has daily direct connection with the prevalence of diseases, thus creating a work environment with safety and comfort, in addition to achieving a sufficient period of rest are some measures that can collaborate to improve the quality of life for workers. In the present study the research was done with teachers according to previous studies they have an important role to society because in addition to worrying about the nation's education are also responsible for teaching social values and are an example to be followed, thus suffering great pressure, becoming an easy target for the development of stress-related illnesses and routine work. In this study there was no association between workload and prevalence of health ills, however it is suggested that further studies be conducted to investigate other parameters especially those of anthropometric nature and amount of weekly physical activity since more than half of this population is overweight.

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**WORKER HEALTH: STUDY ASSOCIATIVE BETWEEN WORK SHIFT AND PREVALENCE OF DISEASE****ABSTRACT**

The workday is directly connected with the welfare of the worker as well with the emergence of diseases caused by overwork. The present study aimed to investigate the association between working hours of teachers in a public HEI state of Paraná and involvement by evils arising from routine work. Study participants were 146 teachers who responded to the workday and diseases, BMI was also calculated and categorized as previously described. There were no significant associations between workload and prevalence of diseases or between working hours and BMI. Thus it is suggested that further studies be conducted to investigate other variables as well that the teacher is of paramount importance to the institution.

**KEYWORDS:** working hours; diseases and BMI

**AGENT DE SANTÉ: ASSOCIATIVE ETUDE ENTRE LE TRAVAIL POSTE ET LA PREVALENCE DE LA MALADIE CHEZ ENSEIGNANTS UNIVERSITÉ****RÉSUMÉ**

La journée de travail a prise directe avec le bien-être d'employer, ainsi comme le lever des maladies occasionnées par l'excès de travail. Cette étude a eu comme objectif enquêter l'association entre la journée de travail des professeurs d'une IES publique du l'étad du Paraná et l'évènement pour mals aquérés du quotidien de travail. On a fait partie de l'étude 146 professeurs, que ont répondu le questionnaire sur la journée de travail et maladies, IMC a aussi calculé et classifié en catégories comme a déjà été décrit. N'ont pas été rencontrés des associations significatives entre la journée de travail et la prédominance des maladies, ni entre la journée de travail et IMC. De cette façon, on sugère que nouvelles études soient réalisées en enquêtant d'autres variables, une fois que le bien-être du professeur é très important par l'intuition.

**MOTS-CLÉS:** journée de travail; maladies et IMC

**SALUD DEL TRABAJADOR: ESTUDIO ASOCIATIVO ENTRE EL TRABAJO POR TURNOS Y PREVALENCIA DE ENFERMEDAD EN LOS PROFESSORES UNIVERSIDAD****RESUMEN**

La jornada laboral tiene relación directa con el been estar del trabajador bien con el surgimiento de dolencias ocasionadas por el exceso de trabajo. El presente estudio tuvo como objetivo investigar la asociación entre la jornada laboral de docentes de una IES pública del Estado del Paraná y el cometimiento or males advindos de la rutina de trabajo. Hicieron parte del estudio 146 profesores que contestaron al cuestionário sobre la jornada laboral y dolencias, IMC también fui calculado y clasificado em categorías como fue descrito arriba. No fueron encontradas asociaciones significativas entre jornada de trabajo y prevalencia de dolencias y ni entre jornada laboral e IMC. De esta manera sugérese que nuevos estúdios Sean realizados investigando otras variables uma vez el bienestar del profesor es de suma importância para la institución.

**PALABRAS CLAVE :** jornada laboral dolencias e IMC.

**SAÚDE DO TRABALHADOR: ESTUDO ASSOCIATIVO ENTRE JORNADA DE TRABALHO E PREVALÊNCIA DE DOENÇAS EM PROFESSORES UNIVERSITÁRIOS****RESUMO**

A jornada de trabalho tem ligação direta com o bem estar do trabalhador bem com o surgimento de doenças ocasionadas pelo excesso de trabalho. O presente estudo teve como objetivo investigar a associação entre a jornada de trabalho de docentes de uma IES pública do estado do Paraná e o acometimento por males advindos da rotina de trabalho. Fizeram parte do estudo 146 professores, que responderam ao questionário sobre jornada de trabalho e doenças, IMC também foi calculado e classificado em categorias como previamente descrito. Não foram encontradas associações significativas entre jornada de trabalho e prevalência de doenças e nem entre jornada de trabalho e IMC. Desta forma sugere-se que novos estudos sejam realizados investigando outras variáveis uma vez que o bem esta do professor é de suma importância para a instituição.

**PALAVRAS-CHAVE:** jornada de trabalho; doenças; IMC.

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