

**115 - LABOR PHYSICAL EXERCISES AND ITS EFFECT IN THE HEALTH OF THE WORKER**

MARCOS VALÉRIO SOARES NASCIMENTO;  
 RAFAEL MODÉ LUNA;  
 REJANE DUARTE L. MONTEIRO.  
 Universidade de Brasília - Brasília - DF - BRASIL  
 mr\_labor@yahoo.com.br

**Introduction**

The recent transformations in the world of the work and the increasing computerization of the society have rationalized each time more the labor activities and provoked increase in the competitiveness, spalling of the people in the work space and fall in the construction of the professional auto-accomplishment. In this direction, the QVT/quality of life in the work appears as a basic concern on the part of the organizations when the desire or the pleasure is mentioned to constitute a work environment where the people are respected as such.

To keep a style of life without any type of physical exercises becomes the sedentary life what it is a great damage for the health of the man. Thus, the production and the quality of life and the work are harmed in function of the increase of the level of stress decurrently of tasks mainly carried through in hot, noisier and humid environments, as for example, kitchens of restaurants where it exists great food production, rigid scale of work and schedules. In these cases, to evaluate the real conditions of work would be something positive in the construction, and environment adequacy optimum of work.

In this way, it makes necessary to invest in quality politics life in the work, that has in its planning the combat to the sedentary, therefore the same promotes the degeneration of the organic systems, as losses of functional physical qualities that they are basic for the aerobic performance, force, located muscular resistance, flexibility to articulate, beyond the accumulation of corporal fat.

However, the labor gymnastics became allied, throughout the years, as writ of prevention and of whitewashing of occupational illnesses and accidents in the work environment. It in such a way presents to the employees one better integration and satisfaction, bringing in its context benefits of emotional, physical, social and economic character for the employee, how much for the employer. For example, the effective improvement of the work environment generates healthful workers and happy, consequently they produce more and with better quality (NASCIMENTO e LUNA, 2007).

When it speaks of labor motivation, exist two sets of motivational theories. The first one is related with the aspects motivators of the work, called as exogenous theory for Katzell and Thompson (1990). These theories understand the aspects of the work with the purpose to value and to stimulate the person for the work being considered the characteristics of the work environment. Generally, these factors can be modified by the organization by means of its strategies of management.

As the group understands the theories related with the personal motivations. They are the calls endogenous theories that, according to Katzell and Thompson (1990), explore the processes or mediating 0 variable of the motivated behavior. The used construtos more are the values, the expectations, the intentions and attributions (Vroom, 1964; Adams, 1965; Locke and Latham, 1990).

Therefore, the motivation in the work environment is only effective if the paid value for the given services satisfactory right and is adjusted with the function or executed tasks. However, the conditions of work, reasonable working hours, and conditions of work must be considered that minimize the risks of illnesses of occupational order and accidents as well as industrial accidents. The chances to stimulate the growth and personal development demand character continue, and this makes possible acquisition of new abilities, chance of progress etc.

In accordance with the adopted model of administration, the social integration in the work organization, allows the personal recognition and rescue of auto-esteem. The egalitarian treatment and absence of preconceptions in the work environment are factors that must be respected, therefore its rights must protect them, and for such, the actions are necessary to adopt procedures adjusted in recognition to all to be adopted for the administration of the work environment.

Socially speaking, the organizations that its collaborating workers do not respect/neglecting the work environment, allow a depreciation of the value of its work, of its career, what in turn it will go to affect auto-esteem of each one. Fernandes (1995) identified main the determinative ones of the QVT. Picture 1 presents these factors:

	<b>Denomination of the Factor</b>	<b>Some Determinative</b>
1	Managerial ability	Partner-emotional support Orientation technique Equality of treatment Management for the example
2	Identification with the company	Identity with the task Identification with the company Image of the company
3	Assistencial concern with the employees	Assistance to the employees Familiar assistance
4	Chance accomplishes of participation	Creativity Personal expression Repercussion of given ideas
5	Vision humanist of the company	Education/awareness Orientation for the people Communitarian responsibility
6	Wage equity	Wages with internal equity Wages with external equity

Picture 1: Main determinative factors of the QVT

Source: Chiavenato (2002)

The people who compose the organizations must have reasons to place its potentialities in the fields social, spiritual, biological and psychic the proper service and of the company. The more motivated the human being it will be, greater will be its condition to transform its ideas into practical. Segundo Megginson (1998) the motivation is a process to induce a person or a group, each one with distinct necessities, to reach the objectives of the organization, while it also tries to reach its objectives.

As Castro (1996) the motivation in the organizational environment deeply is influenced by the form as the leaders support, guide and advise led its. The people inside of a group must be worried about the others, in way that the search for the

accomplishment of its necessities, and desires, are considered as motivation sources. The personal satisfaction is directly on the motivation in the work. However, the creation of a space that it propitiates the valuation of the people, that provides quality of life in the work, is of basic importance so that each person extracts of this way something that allows them to feel motivated and that such motivation is understood and necessary to play the activities in the best possible way. In this way, the participation in the organizations determine a well-being state, and this provides in the people conditions involvement in all taking of decision mainly when the subject is improvements in the work environment.

Thus, it fits to stand out, that the QVT has narrow linking with the act of motivation of the people, and these people in work conditions, if keeps motivated for if finding inserted in the process of improvement of quality of labor life.

Bowditch (2002) defines eight dimensions that together form a set of conditions that if interrelate, fomenting the idea of what we consider and we understand as QVT:

- Compensation adjusted joust and;
- Safe condition of work and to salutary;
- Immediate chance to use and to develop the capacity human being;
- Chance for growth continuity and development;
- Social integration in the work organization;
- Constitutionalism in the work organization;
- Space of work inside of the life as a whole;
- Social relevance of the life in the work.

### Objective

The objective of this study is to ahead evaluate the behavior of servers of the monotonous and repetitive work that involves servers of three sectors of the University HUB/hospital of Brasilia, by means of the QVT politics.

### Sample

It shows the sample of this study was constituted by three sectors of the HUB: 16 servers of the CME/Centro de Materiais and Esterilização; 05 servers of the CTI/Centro of Intensive therapy and 05 servers of the Surgical Pediatrics, totalizing 29 servers.

### Methodology

The sessions of labor gymnastics had been executed 3 times in the week of Monday the Friday, with duration of 20 minutes on average. The involved sectors had been: CME, CTI, and Pediatrics. 29 servers and rendering of services of the University Hospital of Brasilia had participated of the research. The period of inquiry was of January the July of 2008 (with intervention), compared with the period of August of 2007 the January of 2008 (without intervention). Interviews had been used and a questionnaire of topography and Intensity of Pain according to MILK (1997 adapted of BUCHLE, 1987; ECHTERNACH, 1987). A search in the archives of the sector was carried through (CME), with intention to know the reality, as: the amount of removal for medical license and industrial accident. For such, the GL sessions, had understood of global and specific massage, dynamic of group, of individual relaxation and in pair, using techniques of massages and auto massage. They had been executed in each sector of work, where the used space, did not lose its physical characteristics in function of the adopted planning. Before the beginning of the study, it was said the servers that the proposal would have the objective of improvements of quality of life in the work, emphasizing some possible benefits, since the aging process is inevitable it human being.

### Results

Picture 2 shows two periods of one same sector, and compares two realities at deferential moments: the period that we consider control (without intervention), of February the September of 2007, compared with the period with intervention, of February the September of 2008. How much to the medical licenses: comparing the two moments, it approximately had a reduction of 50% in the period with intervention, that is, with the Labor gymnastics. However, considering the amount of days not worked for the team, fruit of the medical licenses, the period of control totalized 1,086 days. For the period with GL, it had a considerable reduction, totalizing 511 days not worked, and this positive result, can be consequences of the planning executed for the GL. As the point in question sends to the occurred industrial accidents in the periods in study. 10 industrial accidents had occurred in the period have controlled, transformed into 89 days not worked. However, in the period with GL, surprising, it did not have no industrial accident, this better means distribution of tasks, to diminish of the risks of accidents, the levels of it stress are probably lesser, and this can also be understood as bigger complicity between team and manages. It is known that the GL, when planned well and executed, makes possible the involvement and sharpens the perception between the people, and this, unchains a series of behaviors, that until then were not perceived as: to look for to know if its pair is well; to offer when necessary aid; to be always well humored at last, to partition of relaxed moments in team etc. Consequence of this is a present team and that it is searching the QVT.

Month REASON OF THE REMOVAL	2007				2008			
	MEDICAL LICENCE	TOTAL OF DAYS	WORK ACCIDENT	TOTAL OF DAYS	MEDICAL LICENCE	TOTAL OF DAYS	WORK ACCIDENT	TOTAL OF DAYS
February	06	64	-	-	07	99	-	-
March	12	138	-	-	03	56	-	-
April	08	104	01	04	03	58	-	-
May	10	114	01	06	03	14	-	-
June	12	158	03	16	08	55	-	-
July	14	158	03	34	07	70	-	-
August	10	153	02	29	08	68	-	-
September	20	197	-	-	08	91	-	-
	92	1.086	10	89	47	511		

**Picture 2:** Comparative degree of removals for month, only of the servers of the CME - February the September/2007 - February the September/2008

Picture 3 shows the extracted results of a questionnaire, where it was asked in principle, if before felt pain and after the GL. Initially 65.52% had affirmed that they felt pains, and 51.72% had affirmed that I felt pains same executing the labor exercises. In relation to Yes the initial one, 13.8% are considered positive, therefore it translates less serving with I bother of pain in labor activity. For Not before and later, a difference 14.32% is a result that evidences the importance of the type of adopted intervention, and this is understood as improvement in the quality of life and the work. How much the Intensity of pain, we detach a maximum reduction of 13,8% of pain, difference that allows serving more in work conditions. Moderate pain increased in result of the reduction of the maximum percentage of pain. In this context, we detach an increase in the number of people who do not coexist more pain in the accomplishment of labor tasks. The percentage is of -9,65% of servers without pain in the work.

Question:	Before		After		Diference %
It feels Pain	YES	65,52%	YES	51,72%	13,8 %
	NO	34,48%	NO	48,28%	-14,32 %
Intensity of pain	Principle	48,28%	Principle	10,34%	37,94 %
	Moderate	34,48%	Moderate	62,07%	-27,59
	No one	17,24%	No one	27,59%	-9,65 %

Picture 4 presents the points of pain and the amount of points indicated for the involved groups in the study. In this way, we detach the regions arms and lumbar as regions frequently demanded in the work routine. In this way, such reduction can be decurrently of the work of allonge and strengthening adopted in the sessions of labor exercises. Positive É to say that the aid given to the servers how much to the position at the moment to execute definitive tasks, perhaps either plus an excellent point and that this must be considered as priority when we speak in well-being of the worker. Thus, other profits can be can be evidenced in picture 4, however it fits to investigate this field better.

Points of pains	Cervical	4	Cervical	2
	Chest	10	Chest	8
	Arms	6	Arms	3
	Shoulder	5	Shoulder	3
	Lombar	15	Lombar	9
	Knees	3	Knees	2
	Legs	5	Legs	5
	Foot	2	Foot	2
	<b>TOTAL</b>	<b>50</b>	<b>TOTAL</b>	<b>34</b>

**Picture 4:** Result of the evaluation of the intervention of the Labor Gymnastics in the servers of the CME - UTI Pediatrics

Interview with the Head of the CME - Ana Lúcia - is possible to tell that the situation unsustainable had the amount of removal (LM). The always incomplete scales of work causing overload in the servers of the sector. The levels of stress of all the team were highest, mainly in its sector front the daily commitments that would have to fulfill. After some failed attempts, were in search of a solution to face the problem. Thus, it took knowledge of the GL, project of the SRH/Secretaria de Human Recursos of the UnB, coordinated for the Prof. Marcos Valério S. Birth. After meeting with the professor and a detailed planning, was possible to offer the servers of some sectors of the HUB. For its tranquility, the GL was implemented and executed, becoming the motivated team more in the work, promoting, thus, the reduction of removal for medical licenses and industrial accidents. At last, it is a necessary initiative in any environment of work and this proposal of exercises in the work it must be extended to all the servers of the HUB.

### Conclusion

At last, we conclude that the GL when executed well, it can promote changes in the diligent server/, when the quality of life in the work is mentioned. The satisfaction and motivation in the work consist of tracing goals of improvements of quality of life, in way that constantly are planned.

The proposals of QVT must be understood as something to be thought and to be rethink, to be planned and re-schemes, reevaluated with clear and positive objectives, in way that the interested parties are participative in the planning and execution of the decisions of the process that involve them.

The well most valuable one of an organization is the people. The people are endowed with proper characteristics of personalities, of desires, abilities and of knowledge, at last, of personal motivation and values. One of the functions of the Human resources is to develop programs of qualification and relationships with the diligent servers/, therefore from the moment that the people if feel valued, its performance of its functions gains more quality, if becoming participative more in the performance of its labor activities. The implantation of programs of activities and physical exercises in the work environment, as the Labor Gymnastics, can be understood as a motivational factor, and can be an exit to awake the motivation of the people in the labor environment.

### REFERENCIAS

- ADANS, J. S. Inequity in social exchange. In: BERKOWITZ, L. (Ed.). **Advances in experimental social psychology**. New York: Academic Press, 1965. v. 2. p. 233-256.
- às pessoas. Rio de Janeiro: Campus, 1996
- BOWDITCH, James L. Elementos do comportamento organizacional. Tradução de José BUCKLE, Peter (ed.). **Musculoskeletal disorders at work**. London, Taylor & Francis, 1987. 262p.
- CAMPBELL, J. P. ET AL. **MANAGERIAL BEHAVIOR, PERFORMANCE AND EFFECTIVENESS**. NEW
- CASTRO Alfredo Pires de. Auto motivação: como despertar essa energia e transmiti-la
- CHIAVENATO, Idalberto. Recursos humanos. 7. ed. São Paulo: Atlas, 2002.
- Echternach J. I. **Physical Therapy Of The Hip**. Churchill Livingstone, New York, 1990
- FERNANDES, Eda. Qualidade de vida no trabalho: como medir para melhorar. Salvador: Casa da Qualidade Editora Ltda., 1995.

Henrique Lamendorf. São Paulo: Pioneira Thomson, 2002.

KATZELL, R. A.; THOMPSON, D. E. WORK MOTIVATION: THEORY AND PRACTICE. **AMERICAN PSYCHOLOGIST**, V. 45, N. 2, P. 144-153, 1990.

LOCKE, E. A.; LATHAN, G. P. **A theory of goal-setting and task performance**. Englewood Cliffs, NJ: Prentice Hall, 1990.

MEGGINSON, Leon C., MOSLEY, Donald C., PIETRI, Paul H. Jr., Administração Conceitos e Aplicações. 4ª ed.. São Paulo, Harbra, 1998.

NASCIMENTO, Marcos Valério Soares; LUNA, Rafael Modé. Ginástica laboral: uma proposta de valorização da vida no trabalho. *Anais*. 23º Congresso Internacional de Educação Física. Foz do Iguaçu: FIEP, 2008.

VROON, V. H. **WORK AND MOTIVATION**. NEW YORK: JOHN WILEY & SONS, 1964.

UnB – Colina Bl. B Apto. 11 Campus Universitário Darci Ribeiro  
70910-900 Brasília - DF  
Tel.: 61-81184681  
mr\_labor@yahoo.com.br

#### **ABSTRACT**

The objective of this study is to ahead evaluate the behavior of servers of the monotonous and repetitive work that involves servers of three sectors of the University HUB/hospital of Brasilia, by means of the QVT politics. The sample of this study was constituted by three sectors of the HUB: 16 servers of the CME/Centro de Materiais and Esterilização; 05 servers of the CTI/Centro of Intensive therapy and 05 servers of the Surgical Pediatrics, totalizing 29 servers.

Key-words: exercise repetitive work - QVT

#### **RÉSUMÉ**

L'objectif de cette étude est évaluer le comportement de serveurs devant le travail monotone et répétitif qui implique des serveurs de trois secteurs de HUB/hospital Universitaire de Brasília, moyennant la politique de QVT. L'échantillon de cette étude a été constitué par trois secteurs de HUB: 16 serveurs de CME/Centro de Materiais et Esterilização ; 05 serveurs de CTI/Centro de thérapie Intensive et 05 serveurs de la Pédiatrie Chirurgicale, en totalisant 29 serveurs.

Palavras-chave: exercice - répétitif qui - QVT

#### **RESUMEN**

El objetivo de este estudio es a continuación evaluar el comportamiento de servidores del trabajo monótono y repetidor que implica los servidores de tres sectores de la universidad HUB/hospital de Brasilia, por medio de la política de QVT. La muestra de este estudio fue constituida por tres sectores del CUBO: 16 servidores del CME/Centro de Materiais y de Esterilização; 05 servidores del CTI/Centro de la terapia intensiva y 05 servidores de la pediatría quirúrgica, totalizando 29 servidores.

Palabras-llave: ejercicio trabajo repetitivo - QVT

#### **RESUMO**

O objetivo deste estudo é avaliar o comportamento de servidores diante do trabalho monótono e repetitivo que envolve servidores de três setores do HUB/hospital Universitário de Brasília, mediante a política de QVT. A amostra desse estudo foi constituída por três setores do HUB: 16 servidores do CME/Centro de Materiais e Esterilização; 05 servidores do CTI/Centro de terapia Intensiva e 05 servidores da Pediatria Cirúrgica, totalizando 29 servidores.

Palavras-chave: exercício trabalho repetitivo - QVT