

**125 - EVALUATION OF MOVEMENTS OF BENDING AND EXTENSION OF MAGISTRATES
CUFF/SERVERS REGIONAL LABOUR COURT OF PARTICIPANTS 19th ALAGOAS REGION
GYMNASICS CLASSES OF LABOUR**

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INTRODUCTION

The Gymnastics began to be understood as a major tool in improving the physical health of the employee reducing and preventing occupational problems (HARTMANN et al, 2008). According to Anderson (1998), the human body was not designed to stay long periods in a seated position. Standing still for hours is a relatively recent phenomenon in human history. Over millions of years, our ancestors had to use their bodies and muscles daily.

According to the publications will refer Gymnastics is possible to see that in 1925 Poland was recorded publication of the theme, entitled Gymnastics Pause (PEREIRA, 2001). Meet the needs of workers inside and outside the company, the new view is that business leaders has been incorporating.

(ALVES and VALE, 1998). Three years later in Japan the postal workers started attending daily classes Gymnastics, aiming relaxation and improved health. More was after the Second World War is that practice became widespread and had results like increased productivity, reduction of occupational accidents and the pursuit of the general welfare of workers (CAÑETE, 2001).

There is controversy regarding the starting date of Gymnastics in Brazil, but for Cañete (2001), Gymnastics was introduced in Brazil by executive Nips 1969 in Rio de Janeiro in Ishikavaíima yards, where it is still practiced mainly targeting prevention work accident. In the early 70's the FEEVALE Federation (Higher Education), through the school of Physical Education created a proposal for exercise based on biomechanical analyzes, Compensatory Physical Education and Recreation.

The Gymnastics includes specific stretching exercises, muscle strengthening, motor coordination and relaxation, made in different sectors or departments of the company, in order to prevent and reduce cases of RSI/WMSD (OLIVEIRA, 2006).

The quality of work life is the need to work more deeply in appreciation of working conditions, with regard to the procedures of the task itself, the physical environment and the relationship patterns (LIMONGI-FRANCE, 2001). According to Casagrande (1999), the Gymnastics is a combination of some physical activities with common characteristics to improve under the physiological aspect, the physical condition of the individual in his work, using exercises executed in the workplace and easily performed in sessions 5 or 10 minutes, which should contribute to greater fitness and physical performance, concentration and better positioning on the job.

To Chest (2002), the main goal of Gymnastics is to provide the worker with a healthy life, easing the difficulties during the development of their daily work, improving their physical, mental and personal relationship. There are two types of labor Gymnastics: Preparatory to the Compensatory and Remedial.

Gymnastics Preparatory consists of exercises that prepare the individual for the job of speed, strength or endurance. It is performed before or during the early hours in early labor and consists of heating and/ or stretching of the particular structures required, arousing employees to work, preventing accidents, occupational diseases and muscle strain (PEREIRA, 2001).

Compensatory Gymnastics is held during the work day and lasts for 8 to 10 minutes. This exercise Gymnastics search the corresponding muscles and relax the muscle groups contracted during the workday, aiming to oxygenate the muscle structures involved in the daily tasks of fighting excess tension, the accumulation of lactic acid and preventing possible injuries installations (CAÑETE, 2001).

The Corrective proposal aims to restore the balance central antagonism of muscle, using specific exercises to strengthen the muscles that are stretched and stretch those shortened, is usually applied to a small group of people 10-12 who have the same characteristic postural and morphologic are disabled nonpathological (CAÑETE, 2001).

Aware of all the benefits that Ginástica Labor provides the worker and the company, the Regional Labor Court of Alagoas 19th Region, seeks to provide response mechanisms to prevent and minimize the consequences of various postural defects, Injuries, Occupational Repetitive Strain (LER), which are structures and degenerative cumulative preceded by any pain or discomfort and even the Work Related Disorders (MSDs) (HARTMANN et ali, 2008).

Some studies (Araujo 1998, Bassey 1989), also highlight the need for flexibility training in different age groups according to the magnitude of losses in various joints, which can adversely affect the health quality of life.

Pollock (1998) proposes on quantity and quality in the development and maintenance of flexibility exercises based on growing evidence of the benefits of the same, as improved muscle performance, range of motion and muscle flexibility tendínia, through the mechanisms of proprioceptive reflexes inhibitory and its viscosity.

Dantas (1991) complements describing how that flexibility is responsible for the physical execution of voluntary movements maximum angular amplitude by a pivot joint or joints within the limits morphological and therefore without the risk of causing injury. The more elongate a muscle, the greater the joint motion commanded by that muscle and therefore higher flexibility. (COFFITO, 1999) The cuff injuries are very common, because this joint can be considered as one of the joints that suffer more stress and overload, especially in some professions and even in sports. The most common injuries related to repetitive stress wrist are: tendonitis and tenosynovitis of hand and wrist, carpal tunnel syndrome and De Quervain tenosynovitis.

Based on the above objective was to evaluate the movements of flexion and extension of the wrist magistrates/servers of the Regional Labor Court of the 19th Region Alagoas participating in gymnastics classes.

METHODOLOGY

This research was characterized as a longitudinal descriptive case study of quantitative and qualitative approach, and presented in order to evaluate the impact of a five year program of gymnastics, level of flexibility and quality of life of magistrates / servers Court Regional Labor of the 19th Region Alagoas.

SUBJECT

The sample was composed of magistrates / servers in Regional Labor Court of the 19th Region of Alagoas, located in the municipalities of Maceio, Boulder, Arapiraca, Palmeira dos Índios, São Miguel dos Campos, Watchtower, União dos Palmares, São Luiz do Quitunde, Porto Calvo, Santana do Ipanema, located in the state of Alagoas/Brazil.

SAMPLE

Consisted of 159 magistrates/servers males aged 21-61 years ($X = 42.30$ years) and 148 magistrates/servers females aged 20 to 64 years ($X = 41.60$ years).

PROCEDURES

To join the search to only demand made was that magistrates/servers subjects participated in Gymnastics classes regularly. They were informed about the procedures, tests and protocols used. After clarification, was read and signed the Instrument of Consent (IC).

It was used as a research instrument of the goniometer brand LAFAIETE (Dantas, 2003).

To evaluate the flexibility of the wrist joint angle test was applied to the protocol proposed by the Laboratory of goniometry (LABIFIE) during which the individual should be tested in the standing position, or sedestation, keeping the forearm in pronation with the elbow flexed approximately 90° and still supported on a table or similar, by hand at an angle of 180° with the forearm. Technique: The goniometer must be placed with its central axis on the point stylo, one of the stems on a line drawn from stylo to the point Radial and the other set on the side of the hand on the 5th metacarpal as shown in (Figure 01 and 02), performing then flexion and extension of the wrist joint.

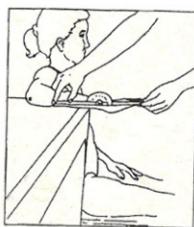


Figura 1



Figura 2

Quadro 1: Adaptado de Norkin & White (1995).

AMPLITUDES MÉDIAS EM GRAUS, DE MOVIMENTOS ARTICULARES .

Articulação	Movimento	American Academy of Orthopaedic Surgeons	KENDALL & MCCREARY	HOPPENFELD	American Medical Association
Ombro	Flexão	0 - 180	0 - 180	0 - 90	0 - 150
	Extensão	0 - 60	0 - 54	0 - 45	0 - 50
	Abdução	0 - 180	0 - 180	0 - 180	0 - 180
	Rotação Medial	0 - 70	0 - 70	0 - 55	0 - 90
	Rotação Lateral	0 - 90	0 - 90	0 - 45	0 - 90
Cotovelo	Flexão	0 - 150	0 - 154	0 - 150	0 - 140
Ante-brago	Pronação	0 - 80	0 - 90	0 - 90	0 - 80
	Supinação	0 - 80	0 - 90	0 - 90	0 - 80
Punho	Extensão	0 - 70	0 - 70	0 - 70	0 - 60
	Flexão	0 - 80	0 - 80	0 - 80	0 - 60
	Desvio Radial	0 - 20	0 - 20	0 - 20	0 - 20
Quadril	Desvio Ulnar	0 - 30	0 - 35	0 - 30	0 - 30
	Flexão	0 - 120	0 - 125	0 - 135	0 - 100
	Extensão	0 - 30	0 - 10	0 - 30	0 - 30
	Abdução	0 - 45	0 - 45	0 - 50	0 - 40
	Adução	0 - 30	0 - 10	0 - 30	0 - 20
Joelho	Rotação Lateral	0 - 45	0 - 45	0 - 45	0 - 40
	Rotação Medial	0 - 45	0 - 45	0 - 35	0 - 50
Tornozelo	Flexão	0 - 135	0 - 140	0 - 135	0 - 150
	Flexão Dorsal	0 - 20	0 - 20	0 - 20	0 - 20
	Flexão Plantar	0 - 50	0 - 45	0 - 50	0 - 40
	Inversão	0 - 35	0 - 35	-	0 - 30
Coluna Cervical	Eversão	0 - 15	0 - 20	-	0 - 20
	Flexão	0 - 45	0 - 45	Queixo toca o peito	0 - 60
	Extensão	0 - 45	0 - 45	Olhar o teto	0 - 75
	Flexão Lateral	0 - 60	-	0 - 45	0 - 80
Coluna Lombar e Torácica	Rotação	-	Queixo alinhado com os ombros	-	-
	Flexão	0 - 80	-	-	-
	Extensão	0 - 25	-	-	-
	Flexão Lateral	0 - 45	-	-	-

Adaptado de Norkin & White (1995, p. 221 - 223)

The results were classified using as reference standards for normal some international suggested for this protocol type as found in the table of average amplitudes in degrees of joint movements adapted Norkin & White (1995).

CONCLUSION

After review and discussion of the results it was found that the magistrates / servers Regional Labor Court of the 19th Region Alagoas are within international standards according to normal standards proposed by the AMERICAN MEDICAL ASSOCIATION (1995) apud Dantas (2003). It is suggested that future research in addition to the procedures used in this research are included procedures for assessment of flexion of the elbow joint, flexion of the shoulder joint, and internal rotation and external rotation of the shoulder joint.

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EVALUATION OF MOVEMENTS OF BENDING AND EXTENSION OF MAGISTRATES CUFF/SERVERS REGIONAL LABOUR COURT OF PARTICIPANTS 19th ALAGOAS REGION GYMNASTICS CLASSES OF LABOUR

ABSTRACT

The Gymnastics began to be understood as a major tool in improving the physical health of the employee reducing and preventing occupational problems. For (HARTMANN et al, 2008). The Regional Labor Court of Alagoas 19th Region concerned about the welfare of mankind in all its aspects, seeks to provide response mechanisms to prevent and minimize the consequences of various postural defects, injuries, occupational repetitive strain (RSI), structures that are degenerative and cumulative preceded by any pain or discomfort and even work-related disorders (MSDs), since we are aware that the body can not be separated from the mind, as it will only be complete and in full harmony, if running perfectly as a whole, in a single unit. Objective: This study aimed to evaluate the movements of flexion and extension of the wrist magistrates/servers Regional Labor Court of the 19th Region Alagoas participating in gymnastics classes. Methodology: The sample consisted of 159 magistrates/servers males aged 21-61 years ($X = 42.30$ years), and 148 magistrates/servers females aged 20 to 64 years ($X = 41.60$ years) of the Regional Labor Court of the 19th Region Alagoas. For data collection test was performed flexion and extension of the wrist joint proposed by Dantas (2003). Data analysis was made through the table proposed by the AMERICAN MEDICAL ASSOCIATION (1995) apud Dantas (2003). Conclusion: The analysis and discussion of the data obtained, it was found in general that the magistrates/servers are within international standards of normality according to the parameters proposed by the American Medical Association, (1995).

KEYWORDS: Flexibility, Joint Wrist, Health and Quality of Life.

ÉVALUATION DES MOUVEMENTS DE FLEXION ET EXTENSION DES MAGISTRATS BRASSARD/SERVEURS COUR DU TRAVAIL RÉGIONAL DE PARTICIPANTS 19ÈME COURS DE GYMNASTIQUE REGION DE TRAVAIL ALAGOAS

RÉSUMÉ

La gymnastique a commencé à être considéré comme un outil majeur dans l'amélioration de la santé physique de l'employé réduire et de prévenir les problèmes professionnels. Pour (Hartmann et al, 2008). Le Tribunal du travail régional de la 19e région Alagoas préoccupés par le bien-être de l'humanité sous tous ses aspects, vise à fournir des mécanismes d'intervention pour prévenir et minimiser les conséquences de divers défauts de posture, les blessures au travail répétitif (LATR), structures qui sont dégénératives et cumulatifs précédée d'une douleur ou d'inconfort et même de travailler troubles liés (TMS), car nous sommes conscients que le corps ne peut pas être séparée de l'esprit, car il ne sera complète et en pleine harmonie, si vous utilisez parfaitement dans son ensemble, en une seule unité. Objectif: Cette étude visait à évaluer les mouvements de flexion et d'extension du poignet magistrats/serveurs Tribunal régional du travail de la 19e région Alagoas participer à des cours de gymnastique. Méthodologie: L'échantillon se composait de 159 magistrats/hommes âgés de 21 à 61 ans ($X = 42,30$ années), et 148 magistrats serveurs/femmes de 20 à 64 ans ($X = 41,60$ années) de la Cour du travail régional de la 19e région Alagoas . Pour le test de la collecte des données a été réalisée flexion et l'extension de l'articulation du poignet proposé par Dantas (2003). L'analyse des données a été faite par le tableau proposé par l'American Medical Association (1995) apud Dantas (2003). Conclusion: L'analyse et la discussion des résultats obtenus, il a été constaté de manière générale que les magistrats/serveurs sont dans les normes internationales de la normalité en fonction des paramètres proposés par l'American Medical Association, (1995).

MOTS-CLÉS: souplesse, l'articulation du poignet, de la Santé et de la Qualité de la Vie.

EVALUACIÓN DE LOS MOVIMIENTOS DE FLEXIÓN Y EXTENSIÓN DE LOS MAGISTRADOS BRAZALETE/SERVIDORES TRIBUNAL REGIONAL DEL TRABAJO DE PARTICIPANTES 19A ALAGOAS GIMNASIA REGION DE CLASES DE TRABAJO.

RESUMEN

Los Gimnasia comenzó a ser entendida como una herramienta importante para mejorar la salud física del empleado reducción y prevención de los problemas laborales. Para (Hartmann et al, 2008). El Tribunal Regional del Trabajo de la Región

19a Alagoas preocupado por el bienestar de la humanidad en todos sus aspectos, busca proporcionar mecanismos de respuesta para prevenir y minimizar las consecuencias de diversos defectos posturales, lesiones, tensión repetitiva (RSI ocupacional), estructuras que son degenerativas y acumulativo precedida por algún dolor o incomodidad e incluso de los trastornos (TME), ya que somos conscientes de que el cuerpo no puede separarse de la mente, ya que sólo será completa y en plena armonía, si se ejecuta perfectamente como un todo, en una sola unidad. Objetivo: El presente estudio tuvo como objetivo evaluar los movimientos de flexión y extensión de la muñeca/servidores magistrados del Tribunal Regional del Trabajo de la Región 19o Alagoas participar en las clases de gimnasia. Metodología: La muestra estuvo constituida por 159 magistrados/hombres 21-61 años de edad servidores ($X = 42,30$ años), y 148 / mujeres magistrados servidores de 20 a 64 años ($X = 41,60$ años) del Tribunal Regional del Trabajo de la Región 19a Alagoas. Para el ensayo de recogida de datos se llevó a cabo la flexión y extensión de la articulación de la muñeca propuesto por Dantas (2003). El análisis de datos se realizó a través de la mesa propuesta por la Asociación Médica Americana (1995) apud Dantas (2003). Conclusión: El análisis y discusión de los datos obtenidos, se observó en general que los magistrados/servidores están dentro de los estándares internacionales de normalidad de acuerdo con los parámetros propuestos por la Asociación Médica Americana, (1995)

PALABRAS CLAVE: Flexibilidad, articulación de la muñeca de la Salud y Calidad de Vida.

AVALIAÇÃO DOS MOVIMENTOS DE FLEXÃO E EXTENSÃO DO PUNHO DE MAGISTRADOS/SERVIDORES DO TRIBUNAL REGIONAL DO TRABALHO DA 19^a REGIÃO ALAGOAS PARTICIPANTES DE AULAS DE GINÁSTICA LABORAL.

RESUMO

A Ginástica Laboral começou a ser compreendida como um grande instrumento na melhoria da saúde física do trabalhador reduzindo e prevenindo problemas ocupacionais. Para (HARTMANN et al, 2008). O Tribunal Regional do Trabalho de Alagoas 19º Região preocupado com o bem estar do homem, em todos os seus aspectos, procura proporcionar mecanismos de respostas que previnam e minimizem as consequências dos mais diversos vícios posturais, das lesões ocupacionais por esforço repetitivo (LER), que são estruturas degenerativas e cumulativas precedidas de alguma dor ou incômodo e ainda os distúrbios relacionados ao trabalho (DORT), visto que somos conscientes que o corpo não pode ser separado da mente, pois ele só estará completo e em harmonia plena, se estiver funcionando perfeitamente como um todo, num conjunto inseparável. Objetivo: O presente estudo teve como objetivo avaliar os movimentos de flexão e extensão do punho de magistrados/servidores do Tribunal Regional do Trabalho da 19ª Região Alagoas participantes de aulas de ginástica laboral. Metodologia: a amostra se constituiu de 159 magistrados/servidores do sexo masculino na faixa etária de 21 a 61 anos ($X = 42,30$ anos), e 148 magistrados/servidores do sexo feminino na faixa etária de 20 a 64 anos ($X = 41,60$ anos) do Tribunal Regional do Trabalho da 19ª Região Alagoas. Para a coleta dos dados foi realizado o teste de flexão e extensão da articulação do punho proposto por Dantas (2003). A análise dos dados se deu através da tabela propostos pela AMERICAN MEDICAL ASSOCIATION (1995) apud Dantas (2003). Conclusão: Após análise e discussão dos dados obtidos, verificou-se de maneira geral que os magistrados/servidores encontram-se dentro dos padrões internacionais de normalidade de acordo com os parâmetros propostos pela American Medical Association (1995).

PALAVRAS-CHAVE: Flexibilidade, Articulação de Punho, Saúde e Qualidade de Vida.