Conclusion: The results showed poor sleep quality by PSQI, moderate sleep efficiency, lower sleep latency and good total sleep time. Regarding the level of physical activity, it was demonstrated that most of these patients were insufficiently active.
Implications: Identifying these changes in these patients will imply the structuring of measures to prevent further complications of the disease and rehabilitation of these repercussions in clinical practice.
Keywords: COVID-19, Sleep parameters, Level of Physical Activity

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97

CAN MUSCLE POWER TRAINING AID THE BIOMECHANICAL AND PHYSIOLOGICAL ADAPTATIONS IN ENDURANCE RUNNERS?

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Background: The performance of long-distance runners is predicted by the interaction between physical variables, and plyometric and endurance training can change the interaction between these variables. In this way, it becomes necessary to investigate these promoted adaptations and how their transfer to performance occurs.
Objectives: The study aimed to verify the combined effect of plyometric and endurance training on performance variables in long-distance runners.
Methods: The sample consisted of 23 male runners between 18 and 50 years old, athletes of 10km races and divided into two experimental groups: combined training (CT; Plyometric + endurance training; n = 11) and isolated training (ET; endurance training only; n = 12). The volunteers were submitted to two moments of evaluation, performed before and after the experimental protocol, consisting of anthropometric evaluations, muscle power, running economy, biomechanical test, maximum progressive test, and 10-km performance. For the experimental protocol, the volunteers were divided into pairs into the ET or CT groups according to the result obtained in the 10-kilometer test performed before the start of training. At the end of the experimental protocol (8 weeks), the athletes were reassessed, and the tests used were the same as those used in the initial assessment.
Results: In muscle power tests, a significant increase in jumps (CMJ and SJ) was reported at the end of training, regardless of the evaluated group. In the biomechanical variables, an increase in contact time with the ground and vertical oscillation was found, in addition to a decrease in stride frequency and leg stiffness at the end of the training protocol, in both analyzed groups. Regarding the physiological variables, an increase in running economy, respiratory compensation points and peak velocity on treadmill was found, but VO_2max remained stable after the experimental protocol. Finally, the final performance in the 10km did not show a significant effect, but the race strategy (initial phase) and peak velocity increased in both groups.
Conclusion: CT (endurance + plyometrics) elicited similar changes in muscle power, biomechanical, physiological and performance variables, when compared to runners who performed ET.
Implications: Even with the lowest volume of running in the CT group, the effects were similar to the group that only performed ET, a relevant finding when considering that a high volume of running training can lead to injuries due to stress or repetition. Based on our findings, it is recommended to include neuromuscular training in weekly training routines, with the insertion of activities aimed at improving contact with the ground, technical efficiency and energy use of the muscle stretching-shortening cycle. It is also suggested that the neuromuscular training load is established according to the periodization and is frequently controlled from the optimal height of the vertical jump. Finally, plyometric activities should be included in specific periods of the training routine, in which the main objective is to improve muscular power.
Keywords: Sport, Strength training, Runners, Performance

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98

WORK-RELATED INJURIES AND PHYSIOTHERAPIES: A BIBLIOMETRIC ANALYSIS

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Background: Every year, millions of workers are affected by repetitive strain injury (RSI) and work-related musculoskeletal disorders (WMSDs), which affect muscles, nerves, ligaments, and tendons due to repetitive strain and overuse. Through bibliometric analysis on RSI/WMSD, it is possible to identify knowledge gaps, expanding areas of research, and emerging trends that may guide future studies and contribute to the advancement of the field.
Objective: Conduct a bibliometric analysis of primary studies on RSI/WMSDs at work and physiotherapies.
Methods: The Boolean search strategy ("Occupational Repetitive Strain Injuries" OR "Work-related Musculoskeletal Disorders" OR "WMSDs" OR "work-related injuries" OR "Occupational injuries" OR "Repetitive Strain Injury" AND “Physio therapy” OR “Physiotherapy”) was performed in March and May 2023 in the Web of Science and Scopus databases, applying a filter for original articles. The records were saved in Plain Text and BibiTeX format and analyzed in R (version 4.2.2) using the "bibliometrix" package (version 4.1.2).
Results: We identified 4.543 articles in the Web of Science and 634 articles in Scopus, with a total of 12.041 authors involved, published between 1952 and 2023. The growth rate was 6,53% per year, with an exponential increase from 1994 onward. The studies were published in 1093 scientific journals, with *American Journal of Industrial Medicine* magazine standing out (n = 368). Barbara Silverstein, from the University of Michigan, EUA, had the highest number of publications (n=37), being recognized as a reference in the areas of worker health and work safety. The article entitled "*Comparison of Selfreport Video Observation and Direct Measurement Methods for Upper Extremity Musculoskeletal Disorder Physical Risk Factors*" by Silverstein et al. (2001) had the highest number of citations (n = 213). The study compared three methods of assessing exposure

to risk factors for work-related musculoskeletal disorders and found that direct measurement by electromyography was more accurate than video analysis and self-report questionnaires. The co-occurrence network analysis of the authors' keywords resulted in the formation of 2 clusters, with emphasis on the themes of workers' compensation ("*injury*", "*work-related injury*", "*prevention*") and occupational injuries ("work-related musculoskeletal disorders", "*ergonomics*", "*physical therapy*").
Conclusion: Bibliometric analysis of primary studies on RSI/WMSDs at work revealed a marked increase in the number of publications in 1994, evidencing the growing interest related to worker safety and health. This growth in scientific production highlights the importance of research in this field and highlights the relevance of the topic in the academic and professional community.
Implications: Evidence-based bibliometric indicators can guide researchers and health professionals in identifying gaps and more influential themes on comprehensive preventive and physiotherapeutic measures in all aspects of the work environment, aiming to reduce the number of workers affected and away from their work activities.
Keywords: RSI/WMSD, Occupational Health, Bibliometric Analysis

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99

ANALYSIS OF THE OCCURRENCE OF FALLS, PAIN, MENTAL HEALTH, AND LEVEL OF PHYSICAL ACTIVITY OF ELDERLY PEOPLE DURING THE COVID-19 PANDEMIC

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Background: During the pandemic caused by Coronavírus, the main strategy to avoid contamination was the lockdown, especially for the elderly population, in which the restriction of physical and social activities may have negatively influenced issues related to mobility and balance, leaving them more susceptible to the occurrence of falls, pain, and the occurrence of mental disorders.
Objectives: To analyze the occurrence of falls, pain, mental health, and level of physical activity of the elderly in times of the COVID-19 pandemic.
Methods: A cross-sectional, descriptive, and quantitative study. The sample of this study consisted of 195 individuals aged 60 years or older, of both sexes, who answered an online questionnaire that contained self-reported information about the history of falls in the last 12 months: contamination by COVID-19. The pain was analyzed using the Analog Pain Scale (VAS), mental health using the Geriatric Depression Scale (GDS), and the level of physical activity was measured using the International Physical Activity Questionnaire (IPAQ). Data were analyzed descriptively in *Statistical Package for the Social Sciences (*SPSS), and reported in absolute and relative frequency, and mean and standard deviation.
Results: Most of the sample consisted of female elderly (71.3%), with a mean age of 70.89(+7.63) years. About a third of the sample (32.8%) reported having suffered at least one fall in the last 12 months, and 21.5% reported having contracted COVID-19 during the pandemic. As for pain, 69.2% reported feeling some kind of pain, and when asked about the intensity of pain, 43.6% reported feeling moderate pain and 13.3% reported feeling severe pain. When analyzing mental health through the GDS, 28.2% of the elderly had possible depressive symptoms, and regarding the level of physical activity, according to the IPAQ, it was observed that 50.3% of the elderly were active or very active, 29.2% were irregularly active and 20.5% were classified as sedentary.
Conclusion: The findings of the present study showed that one third of the sample, predominantly female, reported episodes of falls during the pandemic period, as well as the majority performing some physical activity. Furthermore, it is possible that social isolation, as a strategy for coping with the pandemic, had a negative impact on the mental health of the elderly.
Implications: The pandemic period had a negative impact on the physical and mental health of the population, mainly due to the need for social isolation. Despite its undeniable importance for the control and prevention of COVID-19, it is possible that today's mental health needs will continue well beyond the coronavirus outbreak itself. As we come out of the COVID-19 pandemic and the public health emergency comes to an end, it will be important to consider developing a comprehensive rehabilitation approach based on helping people cope with the aftermath of the pandemic in order to reduce the impact. of COVID-19 on physical and mental health.
Keywords: Fall Accidents, Coronavirus infections, Elderly

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100

EVALUATION OF FUNCTIONAL CAPACITY AND SARCOPENIA IN ADULT WOMEN WITH AND WITHOUT FIBROMYALGIA

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Background: Fibromyalgia is a chronic condition of unknown cause, characterized by widespread pain sensitivity and fatigue. After the updates in the criteria for the diagnosis of sarcopenia, carried out by the European Working Group on Sarcopenia in the Elderly (EWGSOP2), muscle strength reduction has become the main parameter for investigating this condition. In this context, there is a lack of information in the literature about the occurrence of sarcopenia in women with fibromyalgia, considering this new criterion.
Objectives: To evaluate and compare functional capacity and occurrence of sarcopenia in adult women with and without fibromyalgia.
Methods: This is a cross-sectional study carried out at the Integrated School Clinic of the Integrated Institute of Health of the Federal University of Mato Grosso do Sul (CEI/INISA/UFMS). The sample was composed by 38 women aged between 20 and 50 years (with index body mass (BMI) $<30 kg/m^2$, non-pregnant or puerperal women, non-menopausal and without the presence of another rheumatological condition), divided into two groups, fibromyalgia (GF; n=19) and control (GC; n=19), and matched by age. All participants were evaluated for muscle strength using the five-repetition Sitting