

Methods: In this cross-sectional analytical observational study, 31 women answered an online questionnaire. 'Survivors' were considered those who completed treatments (chemotherapy, radiotherapy, and/or surgery) 6 months ago or more. Sociodemographic and oncological characteristics and the International Physical Activity Questionnaire (IPAQ) were questioned. The main barriers and facilitators to the practice of physical activity were also questioned.

Results: The mean age of the women was 49.2 ± 8.4 years (30 – 69 years) and the time since diagnosis was 4.9 ± 3.6 years (1 – 17 years). BMI was 24.9 ± 4.8 (adequate) (17 – 36.7); 75% of the sample resided in urban areas, 66% had completed graduate studies, 22% had completed higher education, 72% were employed, and 22% were retired. Oncological staging at diagnosis was, classified as zero, 12.5% I, 18.8% II, 31.3% III, 9.4% IV, and 6.3% were unable to report. Surgical treatment was used in 97% of cases, 59% underwent radiotherapy, 56% chemotherapy, and 56% hormone therapy. 84.4% of women reported receiving information about physical activity considered relevant after According to the IPAQ-SF (short version), the prevalence of physical activity levels (version) was 44% high, 37% rate and 19% low, and 3617.2 ± 3859.6 MET-min/week total. The main barriers to physical activity reported were issues related to employment (28%), the duration and frequency of physical activity (22%), the feeling of fatigue (22%), and lack of motivation to practice (16%); in addition, 13 women reported not perceiving difficulties. The most prevalent facilitators were health promotion (62%) and well-being (53%), the existence of motivation to practice (37.5%), the presence of medical guidance (28%), and the ease of access to practice sites (22%).

Conclusion: The levels of physical activity found were higher than previously reported in the literature, which may be related to the characteristics of the urbanized sample with a high level of education. Although the majority received professional instruction, it is perceived that the barriers were related to daily demands and that the facilitators were the promotion of health and well-being.

Implications: Research with a larger number of women in different contexts is recommended to promote the levels of physical activity suggested in the literature.

Keywords: Physical Activity, Breast Cancer, Women's Health

Conflict of interest: The authors declare no conflict of interest.

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15

WORK ABSENCE IN HEALTH WORKERS - COMPARATIVE STUDY BEFORE AND DURING THE COVID-19 PANDEMIC

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Background: Several studies have focused on investigating the repercussions of the COVID-19 pandemic. However, in the health-care workers area, there is still a gap regarding the real impacts of the COVID-19 pandemic on the number of medical records, absences from work, and the main complaints of this population.

Objectives: To compare the prevalence of musculoskeletal disorders and sick leave among health professionals at a university hospital in pre and per-pandemic periods of COVID-19. Secondly, we aimed to identify the impact of the COVID-19 pandemic on the occurrence of health complaints of these professionals.

Methods: A retrospective longitudinal study was performed with database analysis from health workers at a University Hospital in Rio de Janeiro. Health-related data from the medical records of these professionals were collected. The workers should be employed at least six months before the pandemic and remain in the hospital for up to six months after the pandemic. Data analysis was based in the comparison of work on the comparison of work absences registered in the medical records of these patients. It also analyzed the occurrence of musculoskeletal pain, and health problems self-related by workers (sleep, depression, anxiety, and psychological assistance).

Results: Data from 189 professionals were included in this study. The mean age of the population was 40.9 years (SD 7.8) and 143 employees (75.6%) were women. The average workload was 34 hours per week (SD 5.8). Professionals had on average 3.8 years of working at the hospital (SD 0.62). The professionals who most presented work-related diseases were nursing technicians 56 (29.6%) and administrative assistants 21 (11.1%). There was no significant difference when comparing the mean number of work absence days in the pre-pandemic period, 10.7 days (SD 19.5), and the per-pandemic period, 13.5 days (SD 15.9) ($p=0.270$). There was also no significant difference when comparing the number of health-related diseases in the same period. However, when observing self-reports on health problems, it was identified that there was interference from the pandemic in the frequency of occurrence of sleep problems ($\chi^2=26,967$; $p=0.01$), episodes of depression ($\chi^2=63,087$; $p=0.01$), anxiety attacks ($\chi^2=67,938$; $p=0.01$) and psychological assistance ($\chi^2=92,706$; $p=0.01$).

Conclusion: There was no difference in the number of work absence days and the number of health-related diseases when comparing the pre-and-pandemic periods. However, it was observed that the pandemic interfered with the occurrence of health complaints.

Implications: The findings indicate that hospital professionals possibly needed to make the decision to work even being sick. Such behavior is also perceived in other work activities and should be more deeply explained by scientific works in the area.

Keywords: Occupational health, COVID-19, Musculoskeletal injury

Conflicts of interest: The authors declare no conflict of interest.

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16

ASSESSMENT OF ABDOMINAL SUBCUTANEOUS ADIPOSE TISSUE THICKNESS BY ULTRASONOGRAPHY: A STUDY OF INTRA-RATER RELIABILITY

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Background: Body fat distribution is an important risk indicator for cardiovascular and metabolic diseases. Ultrasonography (US) is a non-invasive tool without adverse effects, validated to measure subcutaneous adipose tissue (SAT) however its use is evaluator dependent. To our knowledge, there are no reliable studies that

measure the thickness of the SAT in the supra umbilical scar regions using the US.

Objectives: To evaluate the intra-rater reliability for measuring supra-abdominal SAT thickness in the US in adults.

Methods: We evaluated 44 participants (22 women and 22 men), aged between 20 and 42 years. For each gender, 12 eutrophic and 10 overweight participants were included. The participants were submitted to two days of SAT thickness evaluation, with a difference of 7 days between evaluations, using ultrasound (Ultrasound GE Healthcare Venue 40®). The measurements were performed by a linear transducer with a frequency of 12 MHz, positioned transversally one centimeter above and one centimeter below the umbilical scar. The evaluations were always performed by the same evaluator. Three measurements were taken in each region, and the three measurements' average was used. Intra-rater reliability was evaluated using the intraclass correlation coefficient (ICC). The ICC classification was considered low (<0.50), moderate (0.50-0.75), good (0.75-0.90), and excellent (>0.90) correlation. The level of statistical significance was set at $p < 0.05$.

Results: Participants were characterized according to age (females: 25(23-32 years); males: 25(23-29)), body mass (females: 63.85 ± 9.96 ; males: 78.93 ± 11.03), height (females: 1.62 ± 0.06 and males: 1.77 ± 0.05), and body mass index (females: 24.20 ± 3.47 and males: 25.22 ± 3.30). The supra-abdominal ICC in women was 0.82 (confidence interval = 0.62-0.92), and in men, it was 0.91 (0.81-0.96). The infra-abdominal ICC for women was 0.77 (0.52-0.90) and for men was 0.89 (0.75-0.95). The reliability of the supra-abdominal SAT thickness measurement in women was considered good and in men it was excellent. On the other hand, in the infra-abdominal region, it was considered good for both women and men.

Conclusion: Ultrasonographic assessment for supra and infra-abdominal SAT can be performed in adults. Furthermore, there are differences between the reliability of measurements in the supra-abdominal region in men and women.

Implications: The US is characterized as a safe, cost-effective, and accurate method. Besides being painless, non-invasive, and not exposing individuals to ionizing radiation. Considering that the US is a method highly dependent on the skill of the operator, this study evaluated the intra-rater reliability for assessing the thickness of the abdominal SAT of the supra and infra-abdominal regions in men and women. This amplified assessment can be used to track changes in at-risk populations and throughout aging.

Keywords: Subcutaneous Fat, Abdominal, Obesity Abdominal, Cardiovascular System

Conflict of interest: The authors declare no conflict of interest.

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17

CLINICAL AND FUNCTIONAL EFFECTS OF SUPERVISED AND UNSUPERVISED CARDIOPULMONARY REHABILITATION IN POST-COVID-19 SYNDROME: STUDY PROTOCOL FOR A RANDOMIZED CONTROLLED CLINICAL TRIAL

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Background: COVID-19 is an emerging pandemic disease caused by severe acute respiratory syndrome (SARS-CoV-2), and although most of those infected are asymptomatic or have mild symptoms, some develop severe symptoms that can affect their quality of life—and functional capacity. SARS-CoV-2 leads to the involvement and sequelae of systems, especially the musculoskeletal, in addition to the respiratory system. Some of these symptoms persist for a long period, called post-COVID-19 syndrome, directly interfering with the functional capacity and quality of life of these participants. Cardiopulmonary Rehabilitation exercises are focused on restoring functional capacity in patients affected by cardiopulmonary diseases.

Objectives: To evaluate the clinical and functional effects of a quarterly Cardiopulmonary Rehabilitation exercise program for participants with post-COVID-19 syndrome.

Methods: Randomized controlled clinical trial, with three parallel groups and intention-to-treat analysis. This study will be carried out in Rio de Janeiro, RJ, Brazil. A total of 90 participants will be randomized into three groups, one of which will be a control, one will perform face-to-face Cardiopulmonary Rehabilitation exercises (12 weeks, twice a week), and another with home intervention (12 weeks of exercises guided by a self-explanatory booklet). Recruitment began in July 2022. The control group will be instructed not to carry out any intervention during this period. The expected results will demonstrate the clinical effects of a supervised Cardiopulmonary Rehabilitation program and a self-performed exercise program guided by a validated booklet for handling musculoskeletal disorders and persistent symptoms. The results will be analyzed using mixed linear models of repeated measures. The study is double-blind since neither the volunteers nor the professional who performed the protocol are aware of the objectives and clinical valence that will be measured by the study.

Discussion: The findings of this study will help in clinical decision-making regarding the need to carry out a cardiopulmonary rehabilitation program in person or at home, understanding if it is fundamental for the effectiveness of the treatment of this population.

Trial registration: This trial was prospectively registered in Clinical Trials (NCT0457) in May 2022.

Keywords: COVID-19, Cardiopulmonary Rehabilitation, Everyday activities

Conflict of interest: The authors declare no conflict of interest.

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18

ASSESSMENT OF EXERCISE CAPACITY IN INDIVIDUALS HOSPITALIZED FOR COVID-19: COMPARISON BETWEEN 30 DAYS AND 12 MONTHS AFTER HOSPITAL DISCHARGE

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Background: The 6-Minute Step Test (6MST) has been used to evaluate exercise capacity and physiological responses during the test in different populations, to assess physical performance for the activity of stepping up and down a step, as well as check for possible symptoms that the individual may present during the test. The use of 6MST to evaluate the exercise capacity of individuals who were