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PHYSICAL ACTIVITY, SLEEP QUALITY AND FACTORS ASSOCIATED WITH THE WORK ABILITY OF FRONT-LINE PHYSICAL THERAPISTS AGAINST COVID-19

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Background: The COVID-19 pandemic emphasized the importance of physiotherapy for the control and prevention of pulmonary and musculoskeletal complications, with emphasis on the specialty Respiratory Physiotherapy and Physiotherapy in Intensive Care. However, physical, and mental needs due to frontline work, as well as changes in lifestyle in the face of the pandemic, may have interfered with the ability of physiotherapists to work.

Objective: To associate the level of physical activity, sleep quality, and demographic and occupational factors with the work ability of physiotherapists on the front lines against COVID-19.

Methods: This is an analytical, cross-sectional, and quantitative study, Inclusion Criteria: physiotherapists registered with the Regional Council of Physiotherapy and Occupational Therapy and who signed an TCLE. Exclusion criteria: professionals not registered with CREFITO and who have not signed an TCLE. Brazilian physiotherapists working on the front line against COVID-19 responded to an online keyboard that grouped four instruments: a) demographic, occupational and lifestyle data; b) the International Physical Activity Questionnaire (IPAQ); c) the Pittsburgh Sleep Quality Index (PSQI); d) the Work Ability Index (WAI). Data were analyzed and presented in descriptive statistics (absolute and relative values, mean, standard deviation) and associations between ICT results and independent variables, conferring significance when $p \leq 0.05$. The statistical software R version 4.0.0 was used.

Results: Responses were obtained from all regions of Brazil. There was no association between work ability and physical activity level, but work ability was associated with poor sleep quality ($p < 0.001$) and WAI and PSQI values developed significantly negative ($r = -0.340$; $p < 0.001$). In the adjusted analysis, work ability was associated with female gender ($p = 0.018$) and with the clinical diagnosis of COVID-19 progress ($p < 0.001$).

Conclusion: In times of a pandemic, reduced work ability is associated with poor sleep quality, but not with the level of physical activity among physiotherapists on the frontline against COVID-19. The results warn about the potential impact of sleep on the work of professionals who deal with the health of the population, highlighting the need for strategies to support the occupational health of physiotherapists, especially in periods of public health crisis.

Implications: the work implies changes for the reorganization of health professionals' work systems to a format that enables assistance without worsening the levels of overload.

Keywords: Motor Activity, Sleep Wake Disorders, Occupational Health

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

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ASSESSMENT OF THE RISK OF FALLS OF ELDERLY PEOPLE ASSISTED IN THE GERIATRIC OUTPATIENT CLINIC OF A UNIVERSITY HOSPITAL IN BELÉM

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Background: Falls can be defined as the accidental displacement of the individual out of their balance axis towards the ground and represent a major problem for the geriatric population. They are naturally caused by the interaction of experimental factors with the decline in the individual's health and result in several consequences, such as: physical and social vulnerability, loss of independence and quality of life.

Objective: To assess the risk of falls, physical capacity and functional independence of elderly people treated at the geriatrics outpatient clinic of a university hospital in the city of Belém do Pará.

Methods: This is an exploratory descriptive cross-sectional study with quantitative characteristics, which was carried out at the Geriatrics Outpatient Clinic of the João de Barros Barreto University Hospital (HUJBB). The sample was selected voluntarily and included patients of both sexes aged between 60 and 80 years, who were in the waiting room of the HUJBB geriatrics outpatient sector and who agreed to participate in the research by signing the informed consent form. The instruments were applied: Mini Mental State Examination, Katz, Lawton & Brody Questionnaires and Short Physical Performance Battery (SPPB), which is a valid instrument for assessing the risk of falls in the elderly. Data were tabulated in a spreadsheet in Microsoft Excel 2013. Descriptive statistics were performed to detail the sample. To test hypotheses, the Fischer exact test was used and for correlations, Spearman's correlation was used.

Results: Ninety-two patients were included in the survey, with a mean age of 72.92 (± 7.42). There was a strong association between risk of falls and cognitive response ($p = < 0.001$) and risk of falls and instrumental capacity for daily living ($p = < 0.001$). The frequency of smoking (OR: 1.58) and alcoholism (OR: 2.17) show an association with the occurrence of data falls by the SPPB ($p < 0.001$). There was a modulated relationship between the history of falls and the SPPB results ($r = 0.571$), modulated in a modulated way between the Lawton & Brody and SPPB results ($r = 0.571$), strongly modulated between physical activity with SPPB ($r = 0.809$) and very strong between the MMSE and SPPB results ($r = 0.978$).

Conclusion: elderly who are fallers had lower scores on the SPPB, and that they had a history of risk factors such as a history of alcoholism, smoking, low levels of physical activity and tended to have lower scores on the MMSE, Katz and L&B Index.

Implications: the work implies the need to promote the identification and approach of intrinsic and extrinsic risk factors related to the occurrence of falls.

Keywords: Risk Factors, Accidents due to falls, Elderly

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

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