

neurodegenerative diseases in Castilla y León and in Northern and Central Portugal and improve family quality of life outcomes and optimize resources to support and assist family caregivers [1]. **Methods:** Epidemiological diagnosis of the most prevalent neurodegenerative diseases in the district of Bragança, through data obtained from the Northeast Local Health Unit [2]. **Results:** This project aims to strengthen the cooperation between institutions responsible for research and care of neurodegenerative diseases in Castilla y León and in the North and Center of Portugal, in order to improve family quality of life outcomes and optimize resources to support and assist families caring for patients. Discussion and **Conclusions:** Given the aging of the population under consideration, an annual increase of these pathologies is predictable, with a consequent increase in the needs of family caregivers. And so it is urgent to implement specialized social support [3] and enable the family members to care with quality and at the same time to prevent health problems in those who care.

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**Keywords:** Neurodegenerativas, qualidade de vida familiar.

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### Influence of an exercise program in low back pain in ambulance drivers

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**BACKGROUND:** Occupational health aims to prevent occupational hazards, promote and protect the health of workers. Given the high prevalence of low back pain associated with work-related musculoskeletal injuries, it is important to study this topic. The functional incapacity in these individuals, drivers, comes from low back pain as a consequence of risk factors inherent to work activity. Exercise has been found to be beneficial when directed at lower back pain. **Objectives:** To verify the effect of an exercise program on reducing the functional disability of low back pain in ambulance transport drivers. **Methods:** A Quasi-experimental study carried out on 27 individuals, ambulance transport drivers from the Portuguese Red Cross. Ambulance drivers with experience for at least 6 months and with chronic low back pain were included. Individuals that did not sign off was excluded and had pathologies associated with low back pain. A sample characterization questionnaire and the Oswestry Disability Index instrument was applied to assess the disability generated by low back pain before and after the exercise program. The sample was divided non-randomly into an experimental group (n = 14), where an exercise program was applied for 12 weeks, with a weekly session and a duration of approximately 40 minutes per session. The control group (n = 13) did not execute

the exercise program. All subjects were evaluated before and after the application of the exercise program. Data were analyzed the IBM SPSS 24.0 software, with a significance level of 0.05. **Results:** It was observed that the sample presented a degree of functional disability generated by low back pain. Statistically significant differences were found in the Body Mass Index value (p = 0.043). Regarding driving time per day there were also statistically significant differences (p = 0.034). Regarding the Oswestry Disability Index instrument, it was found that the groups do not present homogeneity at the initial moment. In the analysis between M0 and M1 there were statistically significant differences, p = 0.002 and p = 0.017, (experimental group and control group, respectively). **Conclusions:** The exercise program was found to have an effect on the reduction of functional disability generated by low back pain in ambulance drivers.

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**Keywords:** Low Back Pain; Occupational Health; Physical Activity; Physiotherapy

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## P108

### O Efeito de um jogo de realidade virtual no controlo postural dos idosos

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**INTRODUÇÃO:** O processo de envelhecimento acarreta perdas funcionais, nomeadamente do controlo postural (Rath & Wade, 2017), tornando-se por isso necessário encontrar estratégias para diminuir o impacto destas alterações. A atividade física é uma terapia não farmacológica capaz de melhorar o controlo postural dos idosos (Gauchard et al., 2003). A adesão a programas de atividade física pode ser um problema para o idoso por falta de espaços de segurança, falta de hábito, entre outros fatores (Rivera-Torres et al., 2019). Os jogos de realidade virtual, podem ser uma ferramenta terapêutica para promoção da atividade física, permitindo maior motivação, prazer com a sua prática e variedade de estímulos (Betker et al., 2006). **Objetivos:** Avaliar o efeito de um jogo de realidade virtual sobre o controlo postural em idosos saudáveis. **Métodos:** Estudo quasi-experimental, com pré-teste, pós-teste e grupo de controlo. Foi aplicado ao grupo experimental um protocolo de realização de um jogo da consola Wii através de caminhada com obstáculos, realizado 3 vezes por semana durante 3 semanas. Amostra de 29 idosos (17 mulheres e 12 homens com uma média de idade de 75,1±7,9), distribuídos aleatoriamente em dois grupos: Grupo Controlo (n = 15) e o Grupo Experimental (n = 14). Os idosos foram avaliados pelas escalas Berg Balance Scale (BBS) e Timed up and Go (TUG). **Resultados:** No teste TUG, as melhorias foram estatisticamente significativas em