

**Results:** The study shows that there are still difficulties in offering comprehensive care to users in the CER. CER physiotherapists have problems with internal communication and with the care network, in addition to difficulties in operationalizing interprofessional work; and that the physiotherapeutic practice in the CER is still very dependent on equipment and technologies.

**Conclusion:** The knowledge of the particular contexts contained in the physiotherapists' experiences allowed us to identify that there are still barriers to providing expanded and comprehensive care focused on the biopsychosocial model for PwD.

**Implications:** Generating discussions with themes provided from the individual experiences of physiotherapists provides greater understanding of the nuances of institutional disputes, thus extending greater possibilities to subsidize the process of permanent education in health, fostering discussions about the guise of practices of health, improvements in decision-making to improve the organization and work process of CER physiotherapists and provide professionals to reflect on their work process to produce better care in the biopsychosocial perspective of People with Disabilities.

**Keywords:** Physiotherapy, Rehabilitation Centers, Biopsychosocial Models

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

**Acknowledgment:** To the supervisor who guided this research, to FAPESQ/CNPq for funding scientific research through PPSUS 05/2020, to the LEPASC group and UFPB.

**Ethics committee approval:** Research Ethics Committee of the Federal University of Paraíba, CAAE: 37347020.3.0000.5188).

<https://doi.org/10.1016/j.bjpt.2024.100804>

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## ACUTE EFFECT OF AEROBIC AND/OR RESISTANCE EXERCISE ON BLOOD GLUCOSE IN INDIVIDUALS WITH TYPE 2 DIABETES: A SYSTEMATIC LITERATURE REVIEW

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**Background:** Type 2 diabetes (T2DM) is the most prevalent type of diabetes worldwide. Its treatment aims to control glycemic levels, with regular physical exercise being one of its pillars. The hypoglycemic effect of physical exercise varies according to the intensity, duration, type, and time of day it is performed.

**Objectives:** Synthesize the scientific evidence on the effect of a single session of continuous (AEC) or interval (AEI) aerobic exercise and/or resistance exercise (RE) on post-exercise glycemia in individuals with T2DM.

**Methods:** The study protocol (CRD42022289985) followed PRISMA guidelines. The search strategies were elaborated from the acronym PICO (P: individuals  $\geq 18$  years old with DM2; I: a single session of aerobic and/or resistance exercise; C: no exercise or any exercise that did not meet the characteristics of the intervention; O: glycemia measured before and up to 24h post-exercise). The electronic databases CINAHL, Cochrane Library, EMBASE, Google Scholar, LILACS, MEDLINE/Ovid, SciELO, SPORTDiscus, and Web of Science

were searched, including randomized and non-randomized clinical trials published from the inception of the databases until February 2022, without limitation of language. The "Risk of Bias" tool was used to assess the risk of bias in the included studies. Reduction or no significant change in post-exercise glycemia is expressed as ( $\downarrow$ ) or ( $\leftrightarrow$ ), respectively.

**Results:** 25 articles published between 1997 and 2021 were included from 6,237 retrieved from the literature. The total sample consisted of 424 participants (men = 290, women = 119, unreported = 15) aged between 21 and 70 years, with mean values of glycated hemoglobin between  $6.0 \pm 0.3\%$  and  $10.4 \pm 3.0\%$  and body mass index between  $22.2 \pm 2.3$  and  $37.0 \pm 5.7 \text{ kg/m}^2$ . The duration of the exercise sessions varied between 10 and 60 minutes, with moderate to high intensities, and most (72%) were performed in the morning. Thirteen studies investigated AEC vs. control [glycemia: AEC  $\downarrow$ , control  $\leftrightarrow$  (n=10); AEC and control  $\leftrightarrow$  (n=3)]; five investigated AEI vs. control [glycemia: AEI  $\downarrow$ , control  $\leftrightarrow$  (n=2); AEI and control  $\leftrightarrow$  (n=3)]; three studied AEC vs. AEI vs. control [glycemia: AEC and AEI  $\downarrow$ , control  $\leftrightarrow$  (n=2); AEC, AEI, and control  $\leftrightarrow$  (n=1)], three investigated RE vs. control [glycemia: RE and control  $\leftrightarrow$  (n=3)], and one study investigated AEC vs. RE vs. AEC+RE vs. RE+AEC vs. control [glycemia: AEC and RE isolated and combined  $\downarrow$ , control  $\leftrightarrow$ ]. The significant reduction in glycemia was up to 24 hours post-AEC, up to 30 minutes post-AEI, up to 60 minutes post-RE, and up to 45 minutes after AEC and RE combined. The risk of bias was low in 5%, some concerns in 85%, and high in 10% of the included studies.

**Conclusion:** Sequentially, the most recurrent findings were that (1) a single isolated AEC session and (2) a single isolated AEI session can promote a significant reduction in post-exercise glycemia in individuals with T2DM, with the duration of this effect longer after isolated AEC.

**Implication:** The daily practice of aerobic exercises is essential for treating T2DM.

**Keywords:** Diabetes Mellitus, Type 2, Exercise, Systematic Review

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

**Acknowledgment:** The authors to acknowledge that this study was partly financed by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) - Finance Code 001.

**Ethics committee approval:** Not applicable.

<https://doi.org/10.1016/j.bjpt.2024.100805>

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## COGNITIVE AND VISUAL INTERACTIONS IN THE DECLINE OF POSTURAL STABILITY IN HEALTHY OLDER ADULTS

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**Background:** Preserved postural control is essential for older adults' functionality and social participation. Activities of daily living are commonly performed in dual-task situations and usually studied on movement, such as walking, but the interplay between cognitive tasks and vision for static balance control in older adults remains to be studied.

**Objectives:** This study investigated the interactions between cognitive task and visual inputs on upright postural control during aging.