

Influence of combined physicalexerciseoncognition and modulation of epigenetic markers in institution alizedelderly

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The

elderlypopulationhasincreasedexponentially in recentdecades. Withthis, manyelderlypeopleunabletoliveindependently start tolive in long-terminstitutions. Evidencesuggeststhatepigeneticfactors, mainlyreducedlevelsofhistoneacetylation and theBrainDerivedNeurotrophicFactor (BDNF) in thehippocampus, are associated with the aging process and theemergenceofneurodegenerativediseases. The practiceofphysicalexercise is a nonpharmacologicalstrategycapableofminimizing and preventingcognitiveimpairment, improvingmemory and learning processes. Studiesdemonstratethebenefitsofthispractice in institutionalizedelderlypeople, butthe molecular mechanismsinvolved are still unclear. Objective:toevaluatetheeffectof a combinedexerciseprotocoloncognition

Wehopethat, as cognitionhasimproved, global levelsofhistone H4 and BDNF acetylationwillhave positive results.



Aging. Cognition. Epigenetics.

33rd International Conference on Brain Science and Cognitive Research June 01-02, 2020

<u>33rd International Conference on Brain Science and Cognitive Research June 01-02, 2020 Journal of</u> <u>Psychology and Brain Studies</u>