



“Nursing Intervention based on Tai Chi for the Improvement of Equilibrium, Stability and Quality of Gait in Older Adults ”

Luis Cortez-González Sr., RN. Angeles Villarreal-Reyna Sr., PhD. Martha Alicia Magallanes-Monrreal Sr., RN. Daniel Sifuentes-Leura, RN. Diana Berenice Cortes-Montelongo Sr., RN
School of Nursing, Universidad Autónoma de Coahuila
carloscortez110@hotmail.com

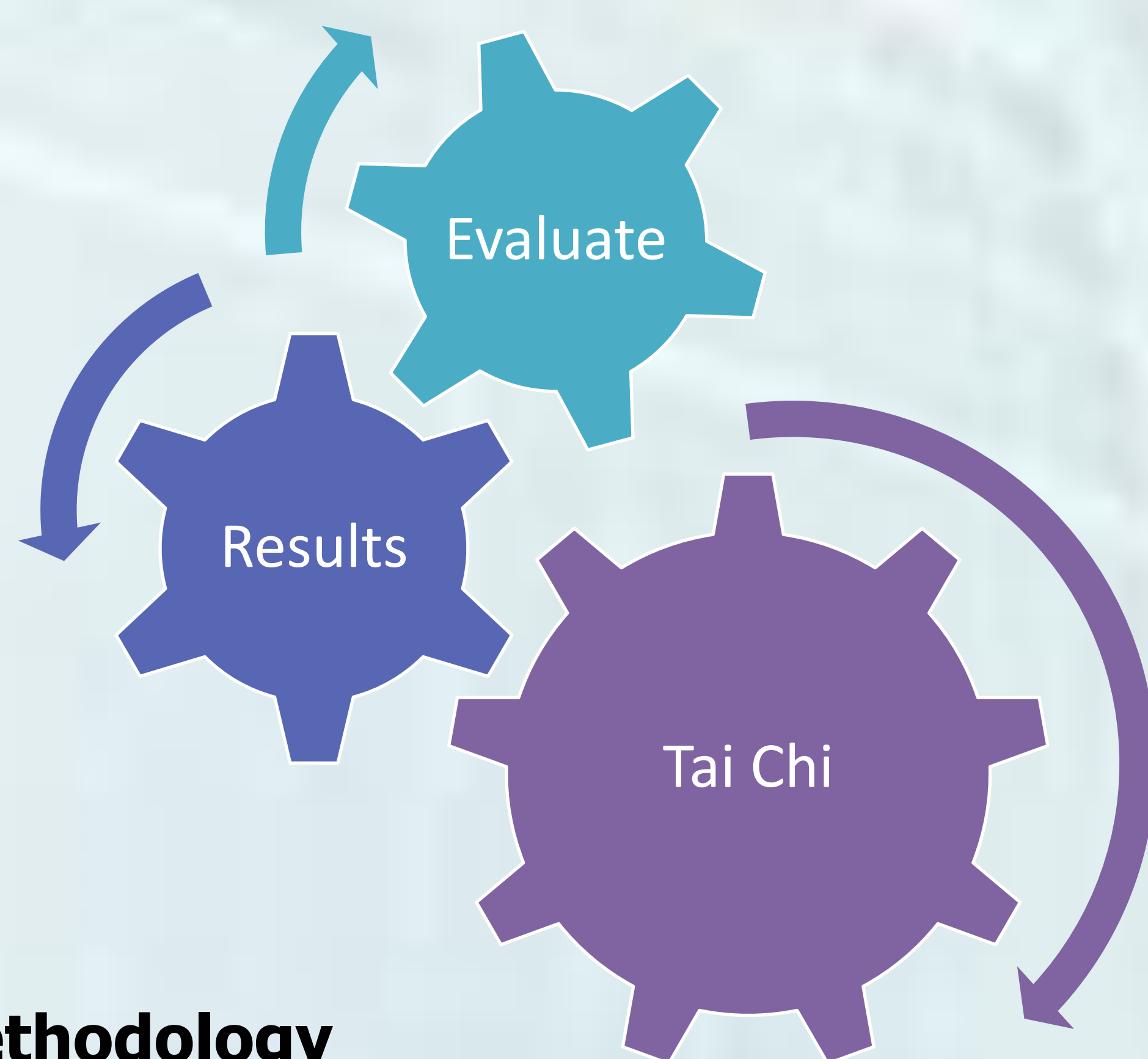


Intruduction

The loss of equilibrium, stability and quality of gait leads older adults (OA) to present a higher risk of suffering falls and, subsequently, this has severe consequences both physical and psychological, not forgetting about its social and economic repercussion, and observing a higher mortality as well, as this causes 70% of the deaths caused by accidents on OA.

Objectives

To evaluate the results of a Tai Chi based program directed to OA, users of a day center in the city of Saltillo, Mexico, with the aim of promote the successful aging of the participants.



Methodology

A quasi-experimental study with two groups and two different measurements (Pretest-Posttest) was proposed in order to evaluate the effect of the intervention on the improvement of the equilibrium, stability and quality of the gait.

The simple was composed of 58 OA with 60 years and over, users of two Integral Attention Centers for the Family (CAIF, for its initials in Spanish) in the city of Saltillo, Mexico. The sampling was realized by convenience. The size of the sample was of 52 OA (G1(n=29); G2(n=23)). The calculation of the simple size was determined considering the statistical analysis of comparison of two independent means, statistical confidence level at 95%, and power of .90 for the interaction time for group and big size of the effect (Lipsey, 1990). Completion using the statistical package nQuery Advisor 4.0 (Elashoff, 2000).

Results

At the end of the intervention, the group in the experimental condition (G1(n=29)), in comparison with the control group (G2(n=23)), showed a statistically significant increment in equilibrium ($G1(n=29) = Md = 93.7; G2(n=23) = Md = 87.5; U = 94.5, z = -3.70; p = <.001, r = 0.55$), stability ($G1(n=29) = Md = 83.3; G2(n=23) = Md = 75.0; U = 160.0; z = -2.17; p = .030; r = 0.32$).and quality of gait ($G1(n=29) = Md = 89.2; G2(n=23) = Md = 82.1; U = 113.5; z = -3.16; p = .002; r = 0.32$).

Equilibrium

Experiment Group G ₁ (n=29)				Control Group G ₂ (n=23)			
Pretest	Posttest	Z	p	Pretest	Posttest	Z	p
Md	Md			Md	Md		
81.2	93.7	-3.64	<.001	93.7	87.5	-1.02	.305

Stability

Experiment Group G ₁ (n=29)				Control Group G ₂ (n=23)			
Pretest	Posttest	Z	p	Pretest	Posttest	Z	p
Md	Md			Md	Md		
66.6	83.3	-2.59	.009	75.0	75.0	-.341	.733

Quality

Experiment Group G ₁ (n=29)				Control Group G ₂ (n=23)			
Pretest	Posttest	Z	p	Pretest	Posttest	Z	p
Md	Md			Md	Md		
75.0	89.2	-3.61	<.001	82.1	82.1	-1.08	.278



Conclusions

Nursing possesses the potential of promote the successful aging when interacting with Older Adults, in order to improve their well-being and quality of life, and because of that, their health. Is for this reason that is necessary to continue testing the Tai Chi program on Older Adults.

Nursing Intervention

Tai Chi

Older Adults

Literature

- 1.- Gastron, G. (2007). Introducción a los síndromes geriátricos. En Zoila, T. Margarita, B. María, R. (Eds.), Latinoamérica envejece visión gerontológica/geriátrica (pp. 263-265) Mc Graw Hill.
- 2.- Kabanchik, A. (2007). Trastornos afectivos: ansiedad y depresión. En Zoila, T. Margarita, B. María, R. (Eds.), Latinoamérica envejece visión gerontológica/geriátrica (pp.320-327) Mc Graw Hill.