

# EARLY WALKING AND MOBILIZATION DURING HOSPITALIZATION OF PATIENTS WITH CHRONIC DISEASE: A SYSTEMATIC REVIEW AND META-ANALYSIS OF EXPERIMENTAL STUDIES





Olga Cortes, RN, MScN, PhD; Sandra Delgado, RN Research Department, Fundacion CardioInfantil Instituto de Cardiología, FCI-IC, Bogotá, D.C, Colombia

# 1.Physical activity (PA) prevents decline and maximize functional independence of inhospital patients with chronic disease. 2. Benefits of in-hospital early mobilization (EA) strategies need to be assessed and implemented.

# **PURPOSE**

To determine the impact of mobilization or walking on the recovery of functional capacity and other events in hospitalized adults with chronic disease.

### **METHODS I**

- 1. Systematic review and meta- analysis.
- 2. Data Sources included were MEDLINE, CINAHL online, HealthStar, EMBASE, Registered Clinical Trials in the Cochrane Library, LILACS, and manual review.
- 3. Studies were reviewed between 2000-2012

## **METHODS II**

- 4. Included Studies:
  - \* RCTs, In any language
  - \*Comparing older adults hospitalized with chronic disease.
  - \* Patients randomized to walking or control group.

# **METHODS III**

Evaluated study eligibility and quality of the studies

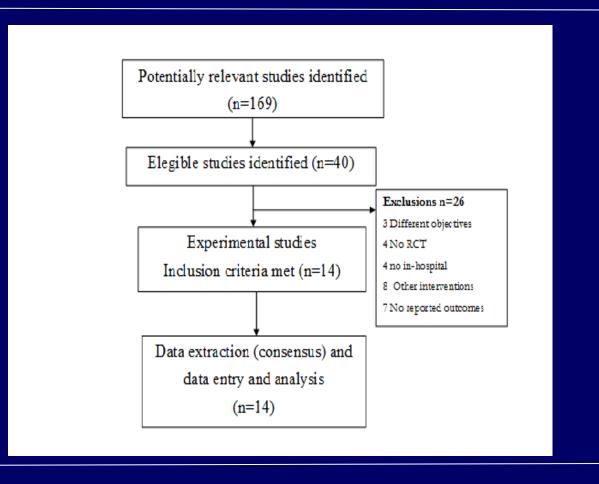
Assessed

- \* standardized mean differences (SMD) or
- \* random effects model (random effect)
- \*heterogeneity (I2 analysis)

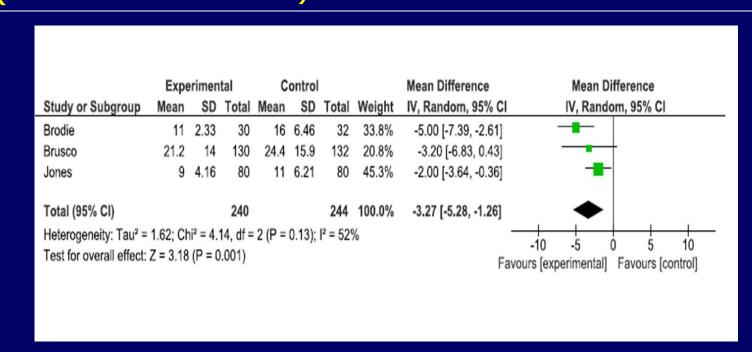
Outcomes were: improved mobility (measured by multiple scales), long stay, falls, and pulmonary thromboembolism.

# **RESULTS**

FLOWCHART OF INCLUDED STUDIES



# **RESULTS:** Improvement in mobility (minute walk scale)



# **RESULTS**: Reduction in-hospital lengh of stay

	Expe	tal	Control				Mean Difference	Mean Difference	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Brodie	11	2.33	30	16	6.46	32	33.8%	-5.00 [-7.39, -2.61]	
Brusco	21.2	14	130	24.4	15.9	132	20.8%	-3.20 [-6.83, 0.43]	<del></del>
Jones	9	4.16	80	11	6.21	80	45.3%	-2.00 [-3.64, -0.36]	-
Total (95% CI)			240			244	100.0%	-3.27 [-5.28, -1.26]	•
Heterogeneity: Tau <sup>2</sup> =	1.62; Ch	i² = 4.	14, df =	2 (P =	0.13);	l <sup>2</sup> = 52 <sup>9</sup>	%	-	-10 -5 0 5
Test for overall effect:	Z = 3.18	(P = 0)	.001)					Fav	ours [experimental] Favours [conti

# CONCLUSION

Our meta-analysis showed an improvement in patients who were exposed to mobilization /walked during hospitalization and a reduction in hospital stay.



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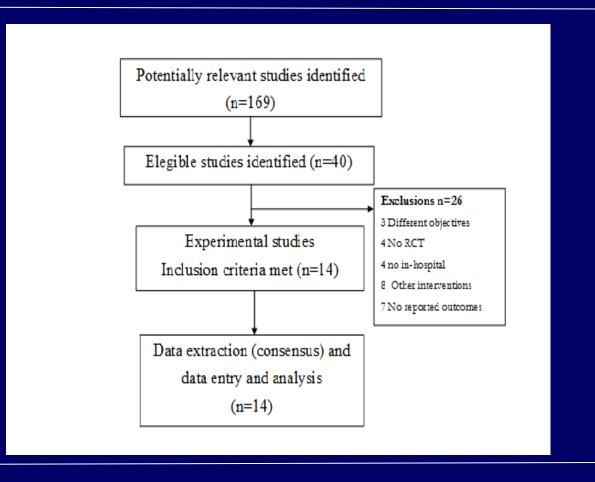
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