

Focus on prefrailty to prevent frailty

The Effect of Exercise on Muscle Strength, Mobility and Balance in Prefrail Older Adults: a Systematic Review and Meta-analysis.

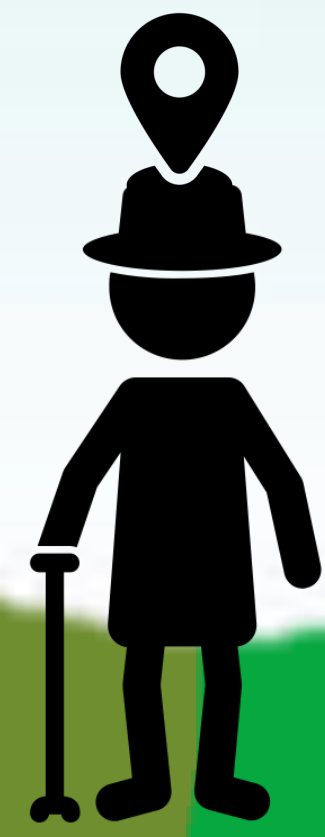
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INTRODUCTION

Did you know that by 2050 one in five people will be aged 60 years or older?

The proportion of older adults in the world is increasing dramatically. Unfortunately, these added life-years are not always spent in good health as the downside of this increased longevity is frailty. **Regular physical activity** is considered a **countermeasure for frailty** as it impacts physical function (i.e. muscle strength, muscle mass, balance, ..).

It is known that with the **progression of frailty**, reversing this condition becomes more difficult, but the effect of training in prefrailty, the precursor of frailty, has never been examined. Therefore, we examined the **effects of exercise on muscle strength, mobility and balance in prefrail older adults** and the effect on **frailty status**.



Prefrailty

METHODS

three electronic databases: Pubmed, Web Of Science and Cochrane library
19 studies were retrieved after full-text screening

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in total 1289 prefrail participants

28.8% became robust (improved) after the intervention
3.5 times more likely to improve frailty status

POSITIVE EFFECT ON FRAILTY STATUS

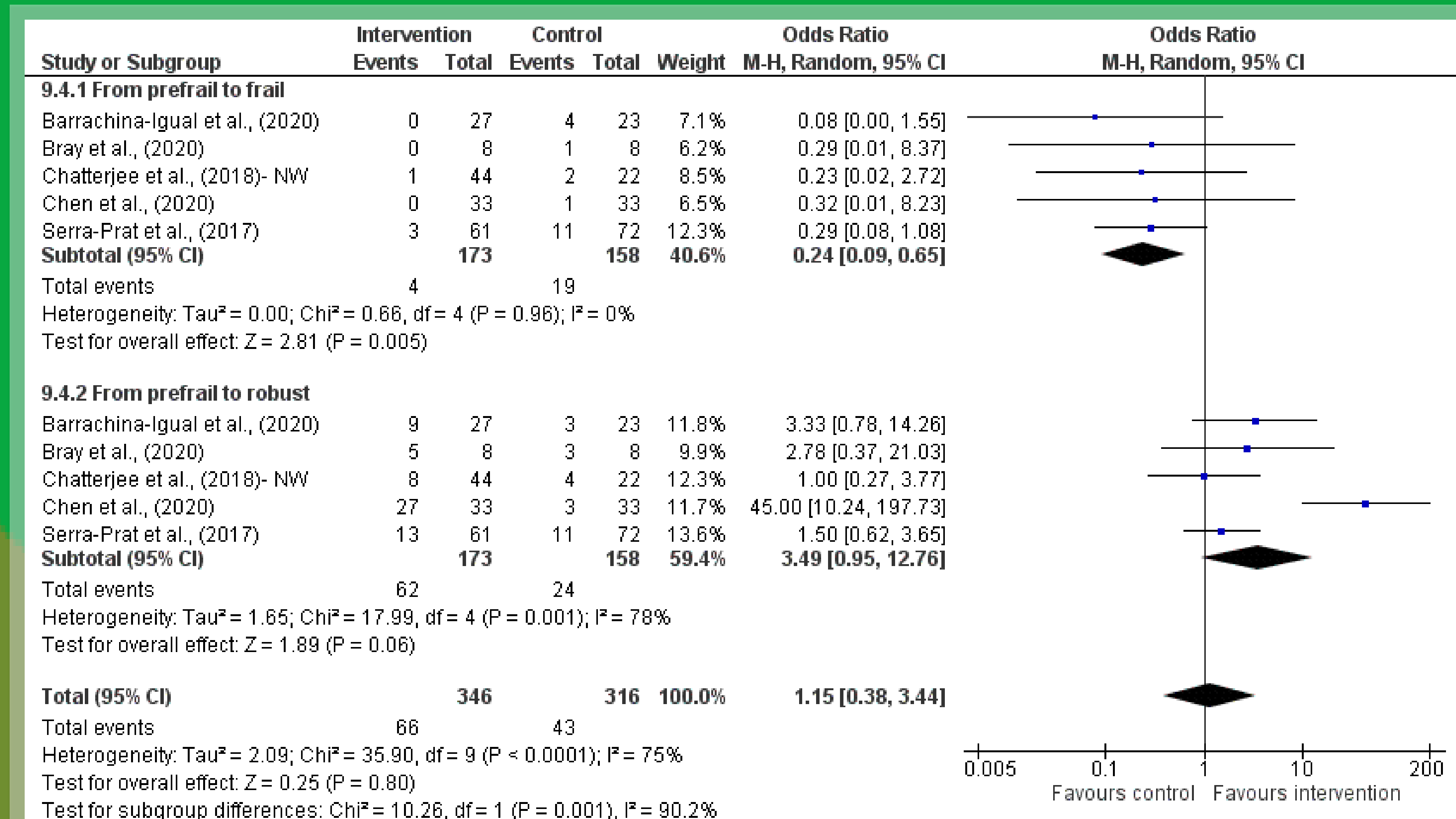


Figure 1: the effect of exercise on frailty status

CONCLUSION

Exercise improves muscle strength and mobility in prefrail older adults and is effective at preventing or delaying the onset of frailty.

WHAT IS PREFRAILTY?

Weight loss	Unintentional loss of >4,5 kg in the past year
Weakness	Handgrip strength in the lowest 20% adjusted for sex and BMI
Exhaustion	Self-reported poor energy and endurance
Slowness	Walking speed in the lowest 20% adjusted for sex and height
Low physical activity	Lowest 20% of Kcal expenditure during the past week

Table 1: Frailty phenotype as proposed by Fried et al., (2001)
0/5 → Robust older adult
1-2/5 → Prefrail older adult
≥3/5 → Frail older adult

EXERCISE IS EFFECTIVE FOR PHYSICAL FUNCTION

