

## ABSTRACT

**Objective:** To analyse correlation between fear of falling with balance and strength of antigravity muscles in elderly women

**Design:** cross sectional study design

**Setting:** Rehabilitation outpatient clinic, Dr. Soetomo Hospital Surabaya.

**Participants:** A total of 41 women aged more than 60 years old who fulfilled the criteria.

**Main Outcome Measures:** Survey of Activities and Fear of Falling in the Elderly (SAFE), Manual Muscle Test (MMT) for antigravity muscle and Berg Balance Scale (BBS).

**Results:** No significant correlation between SAFE and BBS ( $p=0.067$ ). No significant correlation between SAFE and MMT of hip extensors ( $p=0.711$ ), knee extensors ( $p=0.988$ ), and ankle dorsiflexors ( $p=0.887$ ).

**Conclusions:** There is no correlation between fear of falling with balance and antigravity muscles strength.

**Keywords:** elderly, rehabilitation, fear of falling, balance, antigravity muscles.