THE RELATIONSHIP BETWEEN GAIT PATTERNS AND RISK OF FALLING DURING WALKING IN THE OLD PEOPLE.

- Author(s): Meutiah Mutmainnah Abdullah ,Ita Rini ,Hanna Apriliani
- Abstract: Increasing age causes a decrease in physical abilities caused by the loss of the ability of tissues to repair themselves and maintain normal functions. The decrease in physical ability in the elderly will affect the Locomotors function, the musculoskeletal system and other systems resulting changes in walking patterns (step width, stride length and walking speed) which are still controversial related to the risk of falling. This study aims to determine the relationship between gait patterns (step width, stride length and walking speed) to the risk of falls in the elderly at the Batara Hati Mulia Foundationin Gowa Regency. This research is a correlational study with a cross sectional approach and purposive sampling technique. A sample of 55 elderly people aged 60-80 years at the Batara Hati Mulia Foundation in Gowa Regency. The measurement of the gait pattern uses the manual method, namely the footprint on the pedestal and the calculation of walking speed with a stopwatch, while the measurement of Fall Risk uses the Timed up and Go Test (TUGT). Based on the results of the relationship test analysis using Chi-Square, a significant value (p) for the step width is 0.013 so that there is a relationship between the step width and the risk of falling. The significance value (p) for stride length is 0.808 so there is no relationship between stride length and the risk of falling. The significance value (p) for walking speed is 0.769 so that there is no relationship between walking speed and the risk of falling.
- **Keywords:** Physical abilities, tissues, Locomotors function, TUGT