

## ABSTRACT



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### **RELATED PHYSICAL ACTIVITY TO LUNG VITAL CAPACITY CEREBRAL PALSY CHILDREN**

Composed Chapter VI, 62 Pages, 14 Tabels, 9 Pictures, 2 Scheme, 9 Graphs, 9 Attachment

**Objective :** To determine the relationship of physical activity on lung vital capacity in cerebral palsy children. **Methods:** This study is a descriptive correlation to determine the relationship of physical activity on lung vital capacity cerebral palsy children. The study population was all cerebral palsy children Foundation for Physically Disabled Children Jakarta, A sample of 30 cerebral palsy children who have met the requirements of inclusion and exclusion, where the research was conducted in August 2016. Data collection was performed once the sample by measuring physical activity with GMFM and KVP with peak flow meter. **Results :** In testing the hypotheses used *Pearson Correlation* in a group of 30 people with 2 measurements are: Measurement of motor movement of children with cerebral palsy GMFM obtained value – average  $64,5 \pm 15,55$ . While the measurement of lung vital capacity by using *Peak flow meter* ( $FEV_1$ ) cerebral palsy in children obtained average value of  $158,85 \pm 26,874$ , statistical test with *Pearson Correlation* test of physical activity relationship (GMFM) against lung vital capacity ( $FEV_1$ ) Cerebral Palsy child r values obtained for 0,793 with provisions see table r. p value of  $0,001 < 0,05$  so it concluded that  $H_0$  refused and  $H_a$  accepted that there was a significant association between physical activity GMFM against lung vital capacity ( $FEV_1$ ) that concluded the greater the value GMFM Cerebral Palsy child, the better the lung vital capacity. **Conclusion:** GMFM valuable low marks the physical activity the less so as it affects the value of  $FEV_1$  less, GMFM high effect on high physical activity requires more oxygen and give to  $O_2$  is inhaled and processed in the body the greater, for it expiratory volume maximal  $FEV_1$  owned the higher it is.

**Keywords:** Cerebral Palsy, Lung Vital Capacity, Forced Expiratory Volume in one second, Gross Motor Funtion Measure