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# ASSOCIATION BETWEEN COGNITION, QUALITY OF LIFE AND PHYSICAL ACTIVITY IN A SAMPLE OF PHYSICALLY INDEPENDENT INSTITUTIONALIZED ELDERLY PEOPLE IN GALLE DISTRICT, SRI LANKA

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Cognitive function is becoming highly important for independent living of the elderly with weakening extended family support system. This study was conducted to assess the association between cognition, level of physical activity and quality of life (QOL) in a sample of elderly people. This study was conducted with 150 institutionalized elderly people in Galle District. The cognition was assessed via MMSE (Mini mental state examination). The IPAQ (International physical activity questionnaire) was used to assess the level of physical activity while QOL (Quality of Life) was assessed via WHOQOL-BREF (WHO quality of life-BREF). Correlation was assessed through spearman correlation coefficient ( $r$ ) and significant level was kept at  $p < 0.05$ . The sample comprised of 58.7% ( $n=88$ ) females and 41.3% ( $n=62$ ) males with mean age of 71.96 years ( $\pm 6.75$ ). Mean score of MMSE was 22.56 ( $\pm 5.99$ ). Mean score of IPAQ was 1017.51 ( $\pm 564.82$ ) MET-minutes/week. Mean scores of overall quality of life and general health, physical health, psychological health, social relationships and environment domains of WHOQOL-BREF were 53.00 ( $\pm 17.11$ ), 59.45 ( $\pm 17.07$ ), 56.81 ( $\pm 17.03$ ), 48.92 ( $\pm 24.23$ ) and 56.48 ( $\pm 16.1$ ) respectively. MMSE score was significantly correlated with physical activity level ( $r = 0.73, p < 0.01$ ) and with overall quality of life and general health ( $r = 0.49, p < 0.01$ ), physical health ( $r = 0.54, p < 0.01$ ), psychological health ( $r = 0.60, p < 0.01$ ), social relationships ( $r = 0.34, p < 0.01$ ) and environment ( $r = 0.66, p < 0.01$ ) domains of WHOQOL-BREF. Cognitive function of elderly was significantly correlated with their level of physical activities and general health and overall QOL, physical health, psychological health, social relationships and environmental health domains of QOL.

**Keywords:** Cognitive function, Quality of life, Physical activity