PD9: Factors Affecting Health-Related Quality of Life among Children with Special Needs in Kelantan- The Malaysian Perspective

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ABSTRACT

Introduction: Health-Related Quality of Life (HRQOL) is a direct measurement of human population health, life expectancy, causes of death and focused on the impact of health status on quality of life. It covers the domain related to physical, mental, emotional and social functioning. **Method:** Current study aimed to determine the factors may affecting Health-Related Quality of Life of children with special needs age eight to 18 years old in Kelantan, Malaysia. This cross-sectional study involved 130 parents or caregiver of special need children. Demographic information was obtained using proforma sheet, the HRQOL were assessed using Paediatric Quality of Life (PedsQL™) inventory version 4.0 generic score and Comprehensive Test of Nonverbal Intelligence-Second Edition (CTONI-2) was used to assess special need children intelligence. Data analysis involved One-way between group Analysis of Variance, *Pearson* Product-Momment Correlation Analysis and Multiple Linear Regression. **Result:** There was significance difference on children's HRQOL among parents educational background ($p<0.05$) where the *post-hoc* Tukey's with HSD shows a significant difference at $p=0.02$ between the group of parents who never went to school and parents undergoes primary school. Pearson Correlation analysis showed positive correlation between special needs children IQ score ($r = 0.314$; $p <0.001$) and family monthly income ($r = 0.218$; $p = 0.013$) have positive correlation on HRQOL. Multiple linear regression analysis (Adjusted R square =.200) showing 20% change of variance in HRQOL can be explained by IQ score and parents' educational background. **Conclusion:** To summarize, the HRQOL of children with special need was found to be associated with IQ score and parents educational background. Special need children with low IQ and poor parents education background have lower levels of HRQOL in comparison with parents who are well educated.

KEY WORDS:
HRQOL, IQ, Special Needs Children, Kelantan, Malaysia

PD10: Cortical Activation During Motor Imagery and Action Observation of Simple Motor Task: An fMRI Study

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ABSTRACT

Introduction: Motor imagery and action observation seems to be useful in motor facilitation and provide positive impact in motor improvement. The aim of this study is to investigate brain regions related motor imagery and action observe using a simple motor task. **Method:** In this study, functional magnetic resonance imaging (fMRI) was used to study brain activation in sixteen healthy participants who were instructed to imagine and observe simple finger tapping movement. Statistical parametric mapping 12 was used to analyze the result and compare the brain activation between these two conditions. **Results:** Result showed higher activation in supplementary motor area engaged during motor imagery condition. This indicate that motor imagery involve more in motor planning compared to action observation. **Conclusion:** Combined condition activated motor related brain region and it could be suggested as alternative tool in future rehabilitation to help patient who suffered motor impairment after stroke.

KEY WORDS:
Motor imagery, action observation, functional magnetic resonance imaging