## Predictors of health related quality of life among children and adolescents with beta thalassemia in three hospitals in Malaysia: a cross sectional study

## **ABSTRACT**

Background: Prognosticating factors associated with health related quality of life (HRQoL) facilitates better treatment outcomes in patients with beta thalassaemia. This study evaluated the predictors of health related quality of life among children and adolescents with beta thalassaemia in Malaysia. Materials and Methods: A cross sectional study in three public hospitals in Malaysia was conducted between July 2008 and July 2009. All registered patients aged 8 to 18 years with beta thalassaemia and of Malaysian citizenship that attended the haematology daycare centres were invited to participate in this study through their parents. A universal sampling method was used. A pre-tested structured questionnaire was used to record the socio demography, medical information and HROoL (measured by Paediatric Quality of Life InventoryTM version 4.0). Binary logistic regressions were performed to determine the predictors of HRQoL of patients with beta thalassaemia. Result: The mean total scale score, physical health summary score and psychosocial health summary score of the participants were 69.76 (SD 13.10), 69.51 (SD 16.64) and 69.93 (SD 14.89), respectively. The psychosocial subscale: the mean emotional functioning, social functioning and school functioning scores were 71.89 (SD 17.47), 78.93 (SD 17.79) and 58.93 (SD 17.93), respectively. The predictors of poor physical health of HRQoL were not on blood transfusion or chelation treatment (adjusted OR=18.29; 95% CI=4.34, 76.86) and presence of side effects from chelation treatment (adjusted OR=9.67; 95% CI=2.15, 43.56). The predictor of poor psychosocial health of HRQoL was duration of thalassaemia less than 10 years (adjusted OR=4.91; 95% CI=1.71, 14.13). Conclusion: Patients with beta thalassaemia who were not on any blood transfusion or chelation treatment and had side effects from chelation treatment were assoiated with poor physical health of HRQoL, while having thalassaemia less than 10 years was associated with poor psychosocial health of HRQoL.

**Keyword**: Beta thalassaemia; Children; Adolescent; Health related quality of life; Malaysia