Early Intervention Programme to improve the motor outcome in the the High Risk Preterm Infants

Fung B (1), Lam YY (2), Chan YY (1), Wong MT (1), Fung L (1)
Department of Physiotherapy, Kwong Wah Hospital  Department of Paediatrics

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Introduction
Preterm infants are at increased risk of motor impairment. It is suggested that early intervention could be of great importance to the development of movement quality and function of preterm children.

Objectives
To involve parents' participation in the rehabilitation of preterm babies  
To improve the motor outcomes in extremely premature infants

Methodology
All preterm babies less than 28 weeks or 1 kg are referred to physiotherapists for the High Risk Infant Stimulation program in the neonatal intensive care units (NICU). Physiotherapists will attend the preterm once infants can tolerate handling. Elements of program are postural support and movement facilitation techniques, on improving symmetry of posture, muscle balance, and movement in infants, all of which are supporting the foundation of the execution of functional activities in the infant’s daily life. During intervention the infant should be in “State of arousal level” three (eyes open, no movements) or four (eyes open, large movements) according to Prechtl’s states. The duration of the stimulation session lasted for 5- 10 minutes depends on the infants tolerance.  Parents will be educated on the stimulation program. They are recommended to carry out this stimulation during the visiting hour once a day. Parents’ response on such programme was evaluated by questionnaire on Likert Scale from strongly agree to strongly disagree. Infants are to be assessed by physiotherapist at 4 months, 8 months, 12 months, 18 months and till 2 years of age. Motor control assessment using the Alberta Motor Infant Scale (AIMS).

Result
20 preterm babies were involved in this program from December 2014 till January 2016. 90% of parents strongly agreed that the interview with the physiotherapist could decrease their worries on the infant as well as improving their confidence in handling
the infant. 95% of them agreed that the interview with the physiotherapist improved the understanding of their child. 100% understood the aim and the content of this program. 100% of them strongly agreed that they would recommend this program to other parents. 85% of them agreed that they had confident in taking care of the infant on discharge. 100% of them agreed that the stimulation duration was appropriate. 13 of them completed the motor assessment at correctional age equivalent to 4 months. 80% of them scored 50th percentile in AIMS meaning their motor development is up to average. Early intervention program can enhance the efficacy and confidence of the parents in taking care of the preterm infants. Motor control of preterm babies need to be assessed further.