



Service Priorities and Programmes
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Sustaining quality of healthcare service through physiotherapy service review on identifying extremely preterm infants with motor dysfunction in Integrated Developmental Care Program

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Introduction

Early identification of high risk-infants with motor dysfunction is a challenging but important task. It supports early physiotherapy intervention to minimize disability in relation to save corporate money for the economically benefits of the society. Continuous monitoring and reviewing of the ongoing neonatal physiotherapy service in integrated developmental care program (IDCP) aim to sustain the quality of healthcare provision. Literature and preliminary service reviews were done in 2007. The Alberta Infant Motor Scale (AIMS) incorporated with neurological clinical tests had been used since 2008. A review on 4-year data was performed.

Objectives

To review the physiotherapy service of the IDCP on identification of extremely preterm infants with motor dysfunction in order to support early physiotherapy intervention

Methodology

154 extremely premature infants were assessed by physiotherapists in the neonatal clinic at 0,4,8,12,18 months' of corrected age. AIMS together with neurological examinations including muscle tone, reflexes and posture were assessed by experienced physiotherapists who were specialized in motor development. Based on the assessment by physiotherapists, extremely high risk infants with identified motor dysfunction were recommended to neonatology pediatricians for early physiotherapy intervention. The final motor outcome determination of infants would then be assessed and diagnosed by neurology paediatricians at 18-month of corrected age.

Result

Based on the final motor outcome determination of infants at 18 months of corrected age diagnosed by neurology paediatricians, among 154 extremely high-risk infants in 4-year data, 127 of them were regarded as normal; 8 of them were identified as cerebral palsies and 19 of them were suffered from motor delay. A total of 31 infants with motor dysfunction were early identified for intervention by physiotherapists at the

neonatal clinic. The assessment results by the physiotherapists on the identification of extremely high-risk infants with motor dysfunction eligible for early intervention was significantly correlated to the final motor outcome determination diagnosed by neurology paediatricians at the 18 month of corrected age ($r= 0.749$, $p<0.000$). Improvement measures on education of care-givers on the motor development of the preterm infants were suggested during the neonatal clinic follow-up. The importance of follow-up to corrected age of the high-risk infants at 4, 8 & 12 month was also emphasized.