

## The Importance of Development Evaluation to Preterm Children in Remote Area

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**Abstract :** The success of Taiwan's National Health Insurance (NHI) system attracts widespread praise from the international society. However, the availability of medical care in a remote area is limited. Without the convenient public transportation system and mature social welfare policy, these people are difficult to regain their health and prevent disability. Preterm children have more risk to get development delay. Preterm children in a remote area have the human right to get rehabilitation resources as those in the city area. Therefore, the aim of this study was to show the importance of development screening to preterm children in a remote area and attract the government to notice the issue. In Pingtung, children who are suspected development delay would be suggested to take a skillful screening evaluation in our hospital. Those preterm children (within 1-year-old) visited our pediatric clinic would also be referred to take the development evaluation. After the physiatrist's systemic evaluation, the subjects would be scheduled to take the development evaluation. Gross motor, fine motor, speech comprehension/expression and mental study were included. The evaluation was in-charged by a physical therapist, occupational therapy, speech therapist and pediatric psychologist. The tools were Peabody developmental scale, Bayley Scales of Infant and Toddler Development (Bayley-III) and Wechsler Preschool & Primary Scale of Intelligence-Revised (WPPSI-R). In 2013, 459 children received the service in our hospital. Among these children, fifty-seven were noted with preterm baby history (gestation within 37 weeks). Thirty-six of these preterm children, who had never receive development evaluation, were included in this study. Thirty-six subjects (twenty-six male and ten female) were included. Nineteen subjects were found development delay. Six subjects were found suspected development delay. In gross motor, six subjects were development delay and eight were suspected development delay. In fine motor, five subjects were development delay and three were suspected development delay. In speech, sixteen subjects were development delay and six were suspected development delay. In our study, through the provision of development evaluation service, 72.2% preterm baby were found their development delay or suspected delay. They need further early intervention rehabilitation service. We made their parents realize that when development delay was recognized at the early stage, they are often reversible. Not only the patients but also their families were improved their health status. The number of the subjects was limited in our study. Further study might be needed. Compared with 770 physical therapist (PT) and 370 occupational therapy (OT) in Taipei, there are only 108 PT and 54 OT in Pingtung. Further, there are much fewer therapists working on the field of pediatric rehabilitation. Living healthy is a human's right, no matter where does he live. For those development delay children in remote area, particularly preterm children, early detection, and early intervention rehabilitation service could play an important role in decreasing their disability and improving their quality of life. Through this study, we suggest the government to add more national resources on the development evaluation to preterm children in a remote area.

**Keywords :** development, early intervention, preterm children, rehabilitation

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