

ABSTRACT

There is an estimate of around 12 to 26 percent of children with special needs attending early intervention programmes throughout Malaysia. However, very little research has been done on evaluation and monitoring of children with special needs attending these programmes. In order to determine a new method of developmental assessment of children with special needs attending early intervention programmes and to compare their development between clinic (n=27) and community-based (n= 29) centres, a cross-sectional study was conducted. A modified Schedule of Growing Skills (MSGs) assessment was used for this purpose. Concurrent validity was established when MSGs was compared with Denver Developmental Assessment (DDA) which showed an excellent correlation between the two measurements (Spearman's rho = 0.87, $p < 0.001$). Reliability statistical analysis (Cronbach's Alpha = 0.856-0.984) verified MSGs as an appropriate tool to be used for the developmental assessment. The inter-item factor analysis showed consistency between the nine items assessed. The sensitivity and specificity of MSGs in this study was observed to be 83.33% and 33.33% respectively. When the mean scores for children from both centres were compared, it was noted that the children attending the community-based programme (mean = 111.69, CI 95%, 102.18 to 121.20) were more delayed than the clinic-based programme (mean = 80.04, CI 95%, 69.16 to 91.02) and the results were significant ($p < 0.05$). However, there was no difference for gender, diagnosis and severity of developmental delay. This study provides a preliminary data that implicates the usefulness of MSGs as a tool for assessment of developmental milestone for children with special needs. It also has the potential to be used as a tool for monitoring developmental milestone of those attending the intervention programme. Moreover, more studies are recommended to assess the early intervention programmes so that its approach, methods and facilities can be further improved.

ABSTRAK

Setakat ini, dianggarkan seramai 12 hingga 26 peratus kanak-kanak khas mengikuti program intervensi awal di seluruh Malaysia. Namun, tidak banyak kajian yang dilakukan untuk meneliti keberkesanan dan perkembangan kanak-kanak khas yang mengikuti program tersebut. Bagi menentukan cara terbaik untuk menilai perkembangan kanak-kanak khas di dalam program awal intervensi, satu kajian menggunakan kaedah keratin rentas dijalankan di antara 27 orang kanak-kanak khas dari program di klinik dengan 29 orang kanak-kanak khas dari program di pusat masyarakat. Penilaian perkembangan kanak-kanak tersebut dibuat dengan menggunakan 'Schedule of Growing Skills' (MSGs) yang telah dimodifikasi. Kajian statistik untuk kesahan serentak terbukti apabila perbandingan MSGs dan Denver Developmental Assessment (DDA) menunjukkan hubungkait yang amat tinggi (Spearman's $\rho = 0.87, p < 0.001$). Analisa kebolehpercayaan juga membuktikan keberkesanan kaedah MSGs (Cronbach's Alpha = 0.856-0.984). Analisa faktor untuk kesembilan item dalam MSGs juga menunjukkan statistik yang konsisten. Sensitiviti MSGs dalam kajian ini adalah 83.33% dan spesifisitiya adalah 33.33%. Perbandingan purata markah bagi kanak-kanak dari kedua pusat dibandingkan dan didapati kanak-kanak dari pusat masyarakat (purata = 111.69, CI 95%, 102.18 to 121.20) lebih ketinggalan dalam perkembangan dari kanak-kanak di klinik (purata = 80.04, CI 95%, 69.16 to 91.02) dan perbandingan tersebut adalah signifikan ($p < 0.05$). Walaubagaimanapun perbandingan untuk jantung, diagnosa dan tahap perkembangan adalah tidak signifikan. Kajian ini jelas menunjukkan bukti awal keberkesanan MSGs untuk digunakan sebagai kaedah pemeriksaan saringan bagi kanak-kanak khas dan juga mempunyai potensi untuk digunakan sebagai kaedah mengawasi perkembangan mereka yang mengikuti program intervensi. Namun begitu, lebih banyak kajian perlu dijalankan untuk menilai keberkesanan program intervensi supaya strategi dapat di atur untuk memperbaiki kaedah dan kemudahan yang sedia ada.