Letter to the editor

‘Linking motor impairment to function’

SIR—Hilary Hart’s Editorial in the October issue of this journal rightly addressed the effect of terminology on the lives of children with disabilities1. Similarly, recent meetings of the American Academy for Cerebral Palsy & Developmental Medicine and the European Academy of Childhood Disability stressed the benefits of qualifying disability in discrete domains and their associated levels of impact. At both meetings, promising treatments were discussed, such as intrathecal baclofen and botulinum toxin A injections for spasticity in cerebral palsy.

Emphasis was placed on evaluation, and there was a consensus for basing this on changes in functional limitations, with the understanding that the treatment was primarily aimed at reducing impairment. The Gross Motor Function Measure (GMFM) was confirmed as the preferred tool for evaluating motor function. While we strongly believe that reasoning about impairment and using such validated and standard assessment techniques as the GMFM provide essential information for both researchers and clinicians, we regret that more attention was not devoted to a domain that links motor impairment to function, namely motor control, questioning how a task is performed rather than if it is realized. Indeed, recent studies2–11 and a remarkable annotation12 imply how a task is performed rather than if it is realized.

Impairment to function, namely motor control, questions attention was not devoted to a domain that links motor impairment to function. The Gross Motor Function Measure (GMFM) was confirmed as the preferred tool for evaluating motor function. While we strongly believe that reasoning about impairment and using such validated and standard assessment techniques as the GMFM provide essential information for both researchers and clinicians, we regret that more attention was not devoted to a domain that links motor impairment to function, namely motor control, questioning how a task is performed rather than if it is realized. Indeed, recent studies2–11 and a remarkable annotation12 published in this journal, as well as research by many other authors, have not only led to a better understanding of the pathophysiology underlying the disability in selected groups of patients but also directly contributed to determining optimal management. These studies are based on objective and standardizable assessment approaches, the availability of which is increasing with the advances in movement analysis facilities13. We therefore hope that motor control can be integrated in the multidimensional approach to children with disabilities, leading to a specific terminology whose implications on management can objectively improve function.

Bernard Dan MD
Department of Neurology
Hôpital Universitaire des Enfants Reine Fabiola, and
Laboratory of Movement Biomechanics
Université Libre de Bruxelles, Belgium

Guy Cheron PhD
Laboratory of Movement Biomechanics
Université Libre de Bruxelles, and
Laboratory of Neurophysiology
Université de Mons-Hainaut, Belgium

References