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Developing cohesive and strategic communication research.

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Developing cohesive and strategic communication research

Communication disorder is a recognized feature of cerebral palsy (CP) and it is clear from the SPARCLE[1,2] studies that a young person's functional communication partly determines outcomes such as social participation and quality of life. There has been a recent upsurge in research to determine the prevalence of communication difficulties in middle childhood, but comparison across regions has been hampered by the use of different measures. Much research effort has been put into developing and validating classification schemes[3,4] and these will now allow epidemiologists to make broad comparisons of the severity of communication difficulty of children with CP across time and different regions.

Several longitudinal studies are currently underway in the US, UK and Australia[5-7] to track the development of communication in children with CP and to determine the characteristics that predict communication outcome. The newly developed broad classification systems will also be used in these studies as outcome measures. However, communication relies on many functions (principally speech, language, cognition, vision, hearing, and gesture), which can be affected to varying degrees in CP. As a consequence, the communication difficulties experienced by children with CP are wide ranging and children classified at the same functional level on the categorization schemes may have differing characteristics.

To determine the presence of clinical groups who share characteristics and who may benefit from similar interventions, we need additional measures in the longitudinal studies. But at present there is no consensus on exactly what we should measure and how we should measure it. Although the International Classification of Functioning, Disability and Health has informed the design of current studies, and measures of function (speech, understanding of spoken language, and producing spoken language) and communication activity are employed, the selection of measures within the domains is not consistent. Consensus on the skills and characteristics that we should measure, and how this should be achieved, would allow us to compare populations across time and different regions, and give us the potential to amalgamate data sets, thereby increasing the statistical power needed to detect low prevalence groups. Robust demonstration of clinical groups who share characteristics in terms of speech and language function, communicative activity, and participation outcomes would also provide a platform to develop and improve speech and language therapy interventions. Research into the effects of intervention for children with speech, language, and communication difficulties is currently woefully inadequate and as a consequence speech and language services for children vary widely.

One way to press these developments forward would be the formation of a communication research consortium. Other groups are systematically and efficiently addressing similar issues in other disorders (http://www.hta.ac.uk/project/2830.asp) and could bring power to our efforts. And although research groups are spread across the globe, regular conferences such as upcoming European Academy of Childhood Disabilities (http://eacd2013.org/) have presentations on communication and provide the opportunity to share information. Is consensus on a measurement batter for speech, language and communication a pipe dream, or is the field now ready?

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REFERENCES

1. Fauconnier J, Dickinson HO, Beckung E, et al. Participation in life situations of 8-12 year old children with cerebral palsy: cross sectional European study. *BMJ* 2009; **338**: 1458-71.
2. Dickinson HO, Parkinson KN, Ravens-Sieberer U. Self-reported quality of life of 8-12 year-old children with cerebral palsy: a cross-sectional European study. *Lancet* 2007; **369**: 2171-8.
3. Hidecker MJC, Paneth N, Rosenbaum PL, et al. Developing and validating the communication function classification system for individuals with cerebral palsy. *Dev Med Child Neurol* 2011; **53**: 704-10.
4. Pennington L, et al. Classifying the speech of children with cerebral palsy: the Viking speech scale. *Res Dev Disabil*.http://dx.doi.org/10.1016/j.ridd.2013.06.035.
5. Hustad KC, Schueler B, Schultz L, DuHadway C. Intelligibility of 4-year-old children with and without cerebral palsy. *J Speech Lang Hear Res* 2012; **55**: 1177-89.
6. Pennington L, Pearce M. The communication difficulties of children with cerebral palsy at two years of age. 4th International Cerebral Palsy Conference 2012; Pisa, Italy.
7. Boyd RN, Jordan R, Pareezer L, et al. Australian cerebral palsy child study: protocol of a prospective population based study of motor and brain development of preschool aged children with cerebral palsy. *BMC Neurol* 2013; **13**: 57.