The Bobath concept – did globalization reduce it to a Chinese whisper?

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SIR—The issues raised in the editorial by Margaret Mayston[1] have been debated in recent years within the European Bobath Tutors' Association (EBTA). The Bobath concept has kept abreast with fundamental shifts in healthcare, and has moved from a bio-medical model to a bio-psycho-social model, albeit with great variation in how it translates in the clinic and management plans. In cited research, mostly from the late 1980s and 1990s, as well as more recent reviews,[2] NeuroDevelopmental Therapy (NDT) is presented as seeking 'to reduce hyper-reflexia by repositioning the limb on stretch, providing a local pattern-breaking effect mimicking spasticity reduction' (p. 903). Bertha and Karel Bobath, well ahead of their time, admitted that this was an incorrect assumption 32 years ago.[3] As Dr Mayston states, Bobath/NDT are not treatments but 'systems of intervention'.[1] In addition, the similarities and differences between NDT and Bobath have not been explored in depth, and cannot be accepted as the same.[1]

The following principles currently characterize the Bobath concept/school of thought:

(1) A multidisciplinary team designs a strictly individualized management programme based on assessment, reassessment over time, and analysis of abilities and limitations in all domains, beginning as early as possible. Standardized tools are used as they become available. This is done in various environmental contexts, as emphasized in the International Classification of Functioning, Disability and Health (ICF).
(2) Looking forward – that is, setting long-term goals and management to ensure minimization of secondary limitations as these emerge over time, while incorporating the child's and family's short-term goals. It must be clarified that compensatory strategies are not prohibited if these are the only ones available; they are closely followed up to ensure that the development of advanced skills, participation, and quality of life remain optimized.
(3) Use of family-centered principles, ICF, task analysis, and current understanding of neuroplasticity as frameworks.
(4) Facilitation, while the child is engaged in an age-appropriate task or transition, is an active process, making it necessary or possible for the child to sense and adapt to a less functionally limited and stereotyped motor behavior. This can be achieved through changes in the environment or an instance of 'hands-on, hands-off' as soon as the child shows initiation. The child's activity is not interrupted while engaged in a function or a task. The child leads the way and is not moved passively.

Bertha and Karel Bobath viewed their work as unfinished, and advocated continued use of evolving neuroscience. They are not here to say whether an injustice is being done to their living concept, or what can be added or deleted while still calling it Bobath. Maybe the best way forward, in the absence of a criterion standard and the existence of only pockets of evidence, is to find out 'what works best for whom'[4] over the growth spurts.

REFERENCES

1. Mayston M. Bobath and neurodevelopmental therapy: what is the future? *Dev Med Child Neurol* 2016; **58**: 994.
2. Novak I, McIntyre S, Morgan C, et al. A systematic review of interventions for children with cerebral palsy: state of the evidence. *Dev Med Child Neurol* 2013; **55**: 855–910.
3. Bobath K, Bobath B. The neurodevelopmental treatment. In: Scrutton D, editor. Management of the motor disorders of children with cerebral palsy. London: Spastics International Medical Publications, 1984: 6–18.
4. Damiano DL. Meaningfulness of mean group results for determining the optimal motor rehabilitation program for an individual child with cerebral palsy. *Dev Med Child Neurol* 2014; **56**: 1141–46.