

## Is the Bobath approach relevant to neurophysiotherapy in 2010?

### A summary for the Bobath approach NOT being relevant

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The debate held at Congress last month was one of the first times neurophysiotherapists in the UK held an open forum to question the relevance of Bobath. I was honoured to be invited by ACPIN to put across my views alongside my fellow debater Catherine Cornall, Chair of BBTA. I saw the debate as a great opportunity for all of us to question 'where are we now?' My presentation centred on three main arguments during which I questioned the relevance of Bobath in 2010. These were themes I considered to be most relevant to our debate but as the later discussion demonstrated several more were points raised.

#### **Evidence does not support Bobath**

It is acknowledged that evidence based practice consists of the integration of best research evidence together with clinical expertise and patient values. Current clinical research evidence does not support the superiority of Bobath as an effective intervention for sensorimotor control of upper and lower limb, dexterity, mobility, activities of daily living, health-related quality of life, and cost-effectiveness (Kollen et al 2009). Current evidence also questions the rationale for how a patient learns when showing improvement in motor performance post stroke. Longitudinal studies showed that improvement in control of standing balance occurs without significant changes in weight bearing on the paretic leg (de Haart 2005) or significant changes in EMG activation on the paretic side (Garland et al 2003). I therefore question the emphasis given by the Bobath concept on treatments aimed at improving symmetry, alignment and activation. Evidence suggests that when a person stands asymmetrically after stroke they are not necessarily more unstable or at greater risk of falling, rather using efficient strategies to compensate for their deficits (Van Peppen 2008). This suggests that an asymmetric stance could be regarded as a useful functional solution, in which a patient compensates for reduced proprioception, muscle strength and coordination on the paretic side by shifting their balance regulation to the non-paretic side of the body (Geurts et al 2005).

*National Clinical Guidelines for Stroke* support the use of a core set of reliable and sensitive outcome measures to measure the impact of rehabilitation on patients, current Bobath publications make little if no mention of these national guidelines (Intercollegiate Working Party for Stroke 2008). In order for greater efficiency, we should be using the structure of best clinical evidence and key outcome measures as a key basis to facilitate our clinical decision making. As we know that there is likely to be limited time for patients to access rehabilitation, we need to incorporate evidence on functional prognosis to guide our clinical decision making. The tendency of Bobath trained therapists to focus on their detailed albeit skilled observations to determine success of treatments with individuals could constrain the translation of best practice to a wider group. The choice of intervention must be much more closely linked to knowledge about the time-dependent functional prognosis e.g. Dexterity (Kwakkel 2009). Our time and treatment is costly, work to synthesise evidence into guidelines can help clinicians to critically appraise which treatments are potentially most effective, they can also help to support arguments for more staffing and re-organisation of services e.g. Intensity work by Kwakkel informed the NSS- 45 minutes.

Most of our neurophysiotherapy interventions including Bobath are complex – Bobath like every other intervention has assumptions that need to be defined, verified and subject to testing using recognised

frameworks such as the Medical Research Council framework for research into complex interventions. Underpinning research on Bobath as with other interventions should also include detailed evaluation of feasibility and acceptability to patients and their families (Medical Research Council Health Services and Public Health Research Board 2000).

### **Is Bobath in a policy vacuum?**

National Clinical Guidelines for stroke in the UK do not make any reference or recommendation for use of the Bobath concept. This is directly related to the current lack of quality supporting evidence. Guidelines state that rehabilitation should be focusing on intensive and task specific training. We can infer then that as therapists we should be focusing on ways to engage people in rehabilitation, supporting independent learning and self-practice, and reducing the time allocated to a 'hands-on' approach. It is my view having read the recent Bobath book that not enough prominence is given to support independent practice and learning.

Current national policy and research in rehabilitation also strongly supports a person centred approach with collaboration, choice, control, and tailored interventions focused on need. I would strongly question whether current Bobath training provides sufficient emphasis on the values and motivations of patients as recommended in key policy (Skills for Care Skills for Health 2008). A recent report published by the Kings Fund, emphasises the language we use as healthcare professionals needs to be accessible to patients and their families so that responses to treatment and outcomes can be communicated explicitly (Kings Fund 2008). A treatment concept such as Bobath is in danger of being misunderstood by those people it is intended to help, but also those that have not attended courses and other professionals. This runs counter to the evidence that rehabilitation is better when delivered by a specialist team, when all individuals are working towards a common aim informed by the patient's own goals and motivations.

The direction for all rehabilitation is now being strongly informed by policy, in particular Quality, Innovation, Productivity and Prevention (QIPP). Soon we can expect that quality standards, and guidelines produced by organisations such as NICE, will inform the commissioning of all NHS care and payment systems. Inspection will be against essential quality standards. If Bobath lacks explicit reference to the context of policy and guidelines – if we continue focusing on a concept which is not explicitly referred to in national guidelines, we will risk our credibility as an evidence based profession.

### **Is the Bobath concept really person centred?**

Theories of goal setting are now well established, goal setting can energise, motivate and encourage persistence, need not be realistic, but should take into context knowledge, barriers and social influences (Playford et al 2009). It is also acknowledged goal setting takes skill in order to help patients to make logical connections between goals and efforts and interdependence with higher level aspirations (Bandura 1997). Research suggests that the knowledge that you have mastered a task alone without help is a more powerful predictor of outcome than some objective measures eg strength (Le Brasseur et al 2006). This puts into question the use of approaches in which the person does not always make the connection between efforts and outcome ie if a movement is achieved largely through handling and is not seen to equate to a valued personal goal, this could easily influence motivation for self-practice. The focus of the goals must therefore include activities that are meaningful to the individual in order to make the greatest impact and gains on functional performance (Playford et al 2009). Collaborative goal setting is supported by research and national guidelines, yet the recent Bobath book contains detail of GAS goals which appear to be mainly set at impairment level.

The issues of power are frequently addressed by disability theorists and researchers (Whalley Hammell 2008). Technical language which is easily misunderstood can be disempowering not only for patients and support the assumptions of being an 'expert'. For examples of misleading language try '**stop standing**' for sit down! Observations and therapeutic interventions such as those provided by Bobath can highlight what is

wrong with a performance, but who should decide what is an unacceptable or an inefficient performance? People living with a stroke or MS don't all fit into a bell shaped curve, and responses to disability are fluid and flexible. Gaining trunk alignment may not be the most important goal; people rarely if ever express a good outcome in terms of impairment or activity. Research strongly supports that reengagement with social networks is the most important influence on quality of life (Commissioning Support for London, November 2009). In my view the ideology around disability and person centredness is not being addressed adequately if at all within the Bobath concept. Impairment is not the start point for all, participation may be.

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