Dysarthria and group intervention

Sarah Griffiths and **Emily Burtenshaw** describe a university-based group for people with Parkinson's disease

Compared to aphasia, research into group interventions for dysarthria is lacking. However, a recent literature search revealed the following: Laing (2007) reported an improved use of communication strategies by people with multiple sclerosis following group therapy; Manor et al (2005) observed improved vocal frequency range and self-perception of speech intelligibility, although no significant increase in vocal amplitude following group therapy for people with Parkinson's disease (PD) 'based on the Lee Silverman Voice Treatment program'.

PD speech group

Two tutors, one of whom is Lee Silverman Voice Treatment (LSVT) trained, run our group sessions with two second-year students from our three-year BSc (Hons) speech and language therapy programme. This year, eight people with PD attended, including one woman, ranging in age from 58-82 years. Time since diagnosis was from 18 months to 13 years. Four had received therapy in our previous groups.

We first offered new participants four individual sessions, for assessment, goal setting and an introduction to vocal loudness therapy (adapted from LSVT). Four group sessions followed where we integrated clients' chosen goals – facial expressions, expressing humour, getting into a conversation, and communicating effectively against background noise – into group activities.

Terry's perspective

Terry Brown, 66, was one of the new group members. He is a retired project officer for community safety and crime within a major city regeneration project and is also a lay preacher. Terry describes his experiences, "I see myself as a communicator; I was diagnosed with Parkinson in 2006, and I was becoming aware my voice was beginning to weaken, especially when tired."

Terry had seen an SLT before coming to the group, "I had four sessions with the therapist; although helpful with the clarity of my speech, I still lacked volume." He found out about the University College Plymouth Marjon speech group from the secretary of the local PD group.

"After (some)... individual sessions we met together as a group... (we spent time) practising the volume exercise. This had an element of competition about it, for who could hold the note the longest. My previous work... was always about encouraging others to talk and to be heard, and I felt at times, within the group, that I was dominating the conversation."

Telling jokes and anecdotes were among the tasks we used to facilitate a 'functional' approach. Home practice tasks, such as using LOUD voice in everyday phrases, were monitored through check sheets. Through these, we aimed to encourage the quantity and variability of practice required to embed new skills, in accordance with motor learning theory (Maas et al, 2008).

"The group also explored ways we were able to break into conversations and we found we had various methods to achieve this." Participants practised verbal and non-verbal strategies for taking the floor in multiparty conversations.

"From the feedback given by the group, the overwhelming feeling has been one of improved confidence to speak out in a group situation, being also aware of the importance of non-verbal communication and our facial expression. The work within this group has given me confidence again and I know from feedback at church that people can hear me. Another benefit is I felt I was re-connecting again within a group, which gave me confidence when going to other types of groups."
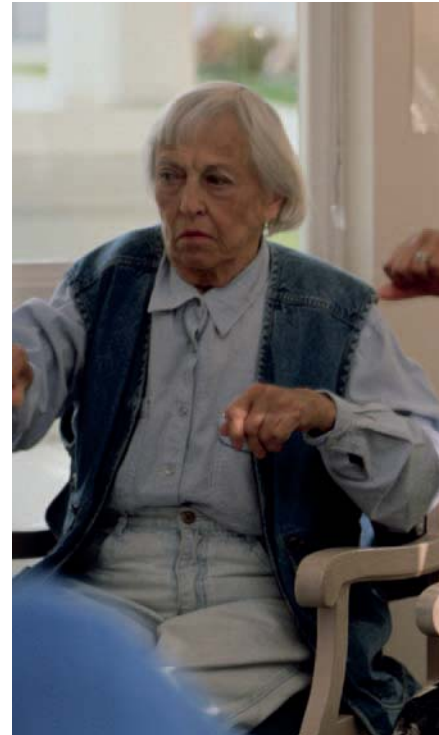
Terry also perceived an increase in confidence in other group members, when he met them in the context of the local PD support group. He felt a key benefit of the speech group was there was overt mention of the condition and its impact on the individual and communication in particular.

"In my experience, even in the PD (support) group, we don't talk about Parkinson's much... as far as the speech group went...you're not alone, you see other people and the way they are coping, and this is very supportive".

Our Year 2 students give their perspective:

Lisa McGowan and Javed Bhunnoo

"Our placement with the PD group was a great experience. We learned so much from everyone and had much more fun than we expected. All the group members had something unique to share. Researching the subject and applying the theory to practice... was invaluable and a great boost to the confidence... learning to demonstrate the tasks in front of the group and our lecturers was really hard at first, but we soon lost our inhibitions... we are truly grateful for the learning opportunities we were given."

Neutral then exaggerated: Terry takes part in a 'facial expressions' task

Figure one: CETI–M SCORES

Group members	CETI-M pre-group	CETI-M post-group
Individual therapy and group		
1	62	83
2	57	64
3	52	58
Returners to group		
4	61	61
5	72	78
6	63	71

psychosocial dimensions.' Group therapy could address many of these shortcomings. A multi-centre research project may be the way forward and with this in mind, group interventions for dysarthria will be the focus of the spring 2011 meeting of our South West Motor Speech Disorders SIG. ■

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References & resources

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Maas E et al. Principles of motor learning in treatment of motor speech disorders. *American Journal of Speech-Language Pathology* 2008;17, 277-298.

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Miller N et al. Survey of speech and language therapy provision for people with Parkinson's disease in the United Kingdom: patients' and carers' perspectives. *International Journal of Language and Communication Disorders* 2010. [Epub ahead of print]

Walshe M et al. Dysarthria Impact Profile: development of a scale to measure psychosocial effects. *International Journal of Language and Communication Disorders* 2009; 44:5, 693-715.

Yorkston KM et al. *Management of motor speech disorders in children and adults.* Austin, Texas: Pro-Ed, 1999.

Further Reading:

National Institute for Health and Clinical Excellence 2006. *Parkinson's Disease: diagnosis and management in primary and secondary care.* Visit www.nice.org.uk.

DYSARTHRIA AND GROUP INTERVENTION

Eight people with PD attended group therapy

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Clients' chosen goals integrated–into group activities

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Individual testimony points to benefits for group members

Measuring outcomes

Terry's testimony points to undoubted benefits for individual group members; however, assessing the group effect on impairment has not proved conclusive. We have tried using a variety of tools, including standardised impairment measures, self-rating perceptual scales and the Dysarthria Impact Profile (Walshe et al, 2009).

Although all have proved useful in planning therapy goals, we wish to investigate further which combination of measures is the most useful for measuring change. Figure one shows the recent group's percentage scores on the Communicative Effectiveness Index Modified (CETI–M) (Yorkston et al, 1999), a carer perceptual rating of communicative effectiveness. The higher the score, the more effectively the client is perceived by a relative to communicate in different communicative contexts. Data for two participants was incomplete and, therefore, not included. All except group member 4 showed improvement, with group member 1 representing a particularly marked change. There tends to be at least one individual per group for whom raising awareness of the need for increased vocal volume proves to be a 'revelation' for both group member and relative (and this was true for Terry).

Conclusions

Anecdotally, SLTs in the UK are providing group therapy for dysarthria associated with PD and other conditions despite the lack of evidence base. We need further research to determine whether this is a viable cost-effective model and if so, which clients benefit most. Miller et al (2010), reporting on a survey of PD related speech and language therapy provision in the UK, suggest key areas for improvement are timing, intensity, duration and access to speech and language therapy 'as well as issues around transfer and maintenance of gains outside clinic and lack of attention to