

0027

Memory Compensation using a Personal Digital Assistant (PDA): Pushing the boundaries of occupational therapy to allow full participation in everyday life after brain injury.

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Background

People with brain injuries often experience problems with prospective memory recall, which means they have difficulty remembering future tasks, such as appointments or taking medications. This brain damage permanently disrupts the brain's capacity for prospective memory, and therefore affects daily functioning, relationships and self-esteem. However, occupational therapists provide compensatory strategies and memory devices in order for patients to successfully participate in daily activities at both home and work.

Aim/Purpose

The purpose of this case report is to demonstrate the use and application of a specific memory aid, an individualised Personal Digital Assistant (PDA), for an adult who sustained a brain injury.

Method

The results of the intervention using a PDA alongside an occupational therapy training program will be reported on a 37-year old woman. This woman had significant memory impairments and executive syndrome deficits resulting from a stroke. The subject attended 10 occupational therapy sessions over 8 weeks to learn how to use a PDA that had been programmed to meet her needs. The outcome measures, including the Goal Attainment Scale and the Rivermead Behavioural Memory Test, were completed at baseline, post-treatment (8 weeks), and follow up (16 weeks).

Results

Goal Attainment Scale scores indicated improvement in all individualised goal areas post-treatment and in follow-up. The subject's family reported significantly reduced carer burden, as she could now participate in meaningful activities. The subject reported that the PDA had given her hope.

Conclusion

The use of an individualised PDA, coupled with a standardised occupational therapy training program may be an effective method for restoring planning, organisation and memory skills in adults after brain injury.

Learning Outcomes

This evidence can inform therapists about an evidence-based training protocol, which allows the integration of latest technology into everyday occupational therapy practice.