A. Lerman (2022) Quantifying aphasia treatment: The effect of aphasia severity on treatment dose, Aphasiology, DOI: 10.1080/02687038.2022.2089970

Background

Treatment dose in aphasia therapy is typically measured by the overall number of treatment hours together with the distribution of treatment sessions over time. However, in order to provide accurate information on treatment dose, it is also necessary to identify and report the active components of any given intervention (Baker, 2012b; Cherney, 2012).

Aims

In this study, the relationship between treatment hours (overall and average per week), post-stroke language abilities, and treatment dose was examined in multilingual people with aphasia. The effect of treatment dose of a targeted linguistic process (relevant SVO sentence production) on treatment outcomes related to that linguistic process was also analysed.

Methods and procedures

Four multilingual people with aphasia received Verb Network Strengthening Treatment in either their L1, or both their L1 and a later-acquired language. The number of times the VNeST protocol was completed (i.e., number of verb cycles) per treatment block was compared to (a) treatment hours and post-stroke language abilities, and (b) treatment outcomes of tasks related to relevant SVO sentence production.

Outcomes and results

With a relatively similar number of treatment hours, a measure of post-stroke language abilities was a good predictor of the number of verb cycles completed during treatment. Furthermore, a higher number of verb cycles completed during treatment indicated more potential for within-language generalisation of relevant SVO sentence production.

Conclusions

Identifying the active component(s) of a given treatment and reporting this information together with post-stroke language abilities and treatment hours will provide more accurate information regarding treatment dose than is currently standardly reported. This information is crucial to a better understanding of the mechanisms of aphasia recovery.