# Reviewing the evidence base for "total communication" therapies for people with aphasia.

Chee Chzi Ching (under the supervision of Dr. Julie Morris and Dr. Janet Webster) Bachelor of Medicine and Bachelor of Surgery (MBBS)

Student ID: 160743326 email: C.C.Chee2@newcastle.edu.my



## Introduction

Aphasia is a communication difficulty affecting the production or comprehension of spoken and written language. The communication difficulties impact social interaction.<sup>1</sup>

"Total communication" is a compensatory therapy approach which encourages people with aphasia (PWA) to communicate using different modalities, including the use of gesture, writing, drawing and even communication charts or books.<sup>2</sup>

There is limited evidence about how to approach "total communication", the techniques and the materials used to carry out "total communication" though this therapy approach is frequently used.

# Aim

- (i) To carry out a literature search about therapy for "total communication"
- (ii) To summarise and critique the existing literature and resources.

## Methods

- Identify search terms and databases for literature review based on background reading. The search terms used were "aphasia", "therapy", "PACE\* ", "total communication", "functional communication", "multimodal communication", "multimodal interaction" and "alternative communication".
- Initial literature search of 4 databases (Web of Science, Medline, Embase and Scopus). 624 articles were accepted for further screening.
- Review of abstracts to identify final articles to be included into the review. Inclusion criteria are:
- Focus of intervention is for PWA
- Therapy given focuses on multiple modalities
- Aim of the therapy is to improve overall or total communication
- Appropriate therapy design with detailed description of outcome evaluation

Only 6 articles were identified as meeting the criteria.

■ Full text review of articles and production of summary of the articles chosen. Due to time constraints, only 3 articles were reviewed in detail.

\*PACE = Promoting Aphasics' Communication Effectiveness

#### References:

- 1) National Aphasia Association. Aphasia Definitions [24th July 2018]. Available from: https://www.aphasia.org/aphasia-definitions/.
- 2) Pound C. Beyond aphasia: therapies for living with communication disability. Bicester: Bicester: Winslow; 2000.

### Results

d		Purdy and Wallace <sup>3</sup>	Carlomagno et al. <sup>4</sup>	Nykanen et al. <sup>5</sup>
h	Participants	3 PWA	2 PWA	34 PWA and their partners
	Type of aphasia	Broca's	Wernicke's	Broca's, Wernicke's, conduction and global
d s e il	Therapy	multimodal communication by clinicians followed by imitation by participants.	3 phases training (object description, event description and story telling) of participants in modified PACE setting with feedback from clinicians without demonstration.	PWA communicate to their partners using any means of communication while the partners ask questions to support understanding. Clinicians only facilitate the conversation.
e 4	Outcome	Improvement was seen in 2 of the 3 participants.	Improvement was only seen in one of the participant.	The communication skills of PWA and their partners improved significantly post-therapy.

## Discussion

Purdy and Wallace<sup>3</sup> and Carlomagno et al.<sup>4</sup> propose that training on usage of compensatory communicative strategies requires cognitive skills to be present for recognising errors and generating solutions in different communicative situations. All three articles agree that individuals who demonstrate some use of non-verbal communication modalities pre-treatment may be the most ideal candidates for multimodal communication treatment.

## Conclusion

There is a need to produce a comprehensive systematic review on the efficacy of "total communication" on therapy for PWA since there are variation in the results of different studies. Studies should be replicated with a larger number of participants to increase reliability.

#### References:

- 3) Purdy M, Wallace SE. Intensive multimodal communication treatment for people with chronic aphasia. Aphasiology. 2016;30(10):1071-93.
- 4) Carlomagno S, Zulian N, Razzano C, De Mercurio I, Marini A. Coverbal gestures in the recovery from severe fluent aphasia: A pilot study. Journal of Communication Disorders. 2013;46(1):84-99.
- 5) Nykänen A, Nyrkkö H, Nykänen M, Brunou R, Rautakoski P. Communication therapy for people with aphasia and their partners (APPUTE). Aphasiology. 2013;27(10):1159-79.