

# Rehabilitation of language and swallowing abilities in patients with DoC: An online international survey

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# **BACKGROUND**

Patients with severe brain injury and disorders of consciousness (DoC) are unable to communicate and often suffer from severe dysphagia. This survey, developed by the International Brain Injury Association (IBIA) - Disorders of Consciousness Special Interest Group (DOC SIG), aims to identify tools used by speech-language therapists, assess their needs, and explore new practices to improve language and swallowing rehabilitation for this population.



Our survey is structured as follows: (1) Study presentation, (2) Socio-demographic data, (3) General guestions on speech and language therapies for post-comatose DoC, (4) Swallowing assessment and management, (5) Language/communication assessment and management, and (6) Conclusion. The English questionnaire was translated into six languages, uploaded to the Alchemer platform, and widely distributed. Here, we present preliminary data from 137 therapists.

# We need vour help!



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# **RESULTS**

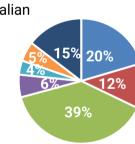
### **DEMOGRAPHIC INFORMATION**

## **SURVEY LANGUAGE**

- French Russian
- Spanish German Dutch

English

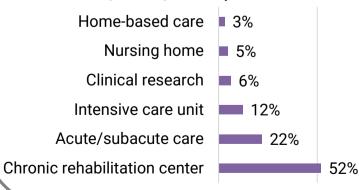
Italian



### **GENDER:**

- •88% female
- •11% male
- •1% transgender female **BACKGROUNDS:**
- •74% speech therapist
- •7% neurologist
- •5% neuropsychologist
- •5% physiatrist
- •10% other (e.g., occupational therapist, nurse, psychologist)

#### **ESTABLISHMENT/DEPARTMENT**



#### **GENERAL OUESTIONS**

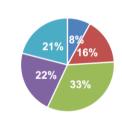
#### YOUR ESTIMATE: PERCENTAGE OF DOC PATIENTS BENEFITING FROM A SPECIFIC SWALLOWING INTERVENTION

■ 0-20% ■ 20-40% ■ 40-60% ■ 60-80% ■ 80-100%

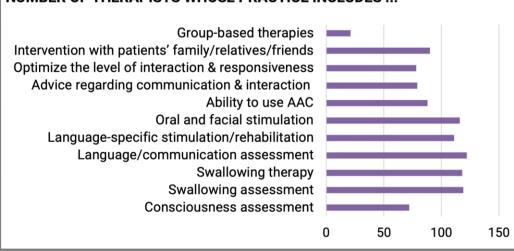


YOUR ESTIMATE: PERCENTAGE OF DOC PATIENTS BENEFITING FROM A SPECIFIC LANGUAGE-RELATED INTERVENTION

**0-20% 20-40% 40-60% 60-80% 80-100%** 



#### NUMBER OF THERAPISTS WHOSE PRACTICE INCLUDES ...



#### **SWALLOWING ASSESSMENT & MANAGEMENT**

### Percentage of therapists who...

- Have already assessed swallowing abilities 74%
- Create/adapt their own tools to assess swallowing abilities 36%
- Regularly monitor for changes in swallowing ability 93%
- Have already managed swallowing abilities 76%
- Advise patients' relatives on swallowing management 91%

#### LANGUAGE/COMMUNICATION ASSESSMENT & MANAGEMENT

#### Percentage of therapists who...

- Have already assessed language/communication abilities –
- Create/adapt tools their language/communication abilities - 31% & to train residual language abilities - 53%
- Include observation of communicative behaviors of patients in a range of settings, including with families and friends – 89%
- Gather information from families and friends regarding patients' specific interests and potentially motivating stimuli –
- Regularly monitor for changes in communicative behaviors · Assess post-comatose patients' ability to use alternative and
- augmentative communication **76**% Have already managed language/communication abilities in post-comatose patients -76%

### Assessment and management tools

- Swallowing assessment based on the Facial Oral Tract Therapy (FOTT), Facial Oral Tract Therapy Swallowing Assessment of Saliva (FOTT-SAS). Swallowing Assessment in Disorders Of (SWADOC), Consciousness Assessment of Swallowing Ability (MASA), Dysphagia Outcome and Severity Scale (DOSS). Gugging Swallowing Screen (GUSS), Fiberoptic Endoscopic Evaluation of Swallowing (FEES).
- Swallowing management based on the Multisensorv and proprioceptive stimulation, Vibratory stimulation, Manual therapy, FOTT, Therapeutic feeding and Behavioral Change Techniques (BCTs).
- Language assessment based on the Glasgow Coma Scale (GCS), Full-Outline of UnResponsiveness scale (FOUR), Coma Scale-Revised Simplified Evaluation of CONsciousness Disorders (SECONDs), Brief Evaluation of Receptive Aphasia (BERA), Mississippi Aphasia Screening, Test (MAST), Language Screening Test (LAST).

# CONCLUSION

This survey highlights the lack of training and guidelines for speech-language therapy in patients with severe brain injury. Early and long-term assessment of language and swallowing should be improved through enhanced or adapted clinical tools. Over 40% of therapists reported gaining new insights into their practice after completing the survey.









