

## RCSLT/ NIHR Dysphagia research priorities Current member research and quality improvement projects

---

### **Gemma Clunie, Clinical Specialist SLT (Airways/ENT) & Clinical Doctoral Research Fellow**

**Project title:** Voice and Swallowing concerns and outcomes of adults with airway stenosis who undergo reconstructive surgery.

**Addressing research priorities:**

**General #3** What is the impact of reflux on swallowing function and health outcomes (including pneumonia) for children and adults who have dysphagia?

**Adult #4** What is the prevalence and nature of dysphagia in adults with respiratory conditions over time?

**Outline of projects:**

1) A qualitative study investigating the patient experience of living with airway stenosis, in particular, the voice and swallowing changes that occur as a consequence of the disease and reconstructive airway surgery. I have completed focus groups and interviews with patients. This will help us to find out what patients want from our care, and the changes we need to make to improve our service.

2) An observational, repeated measures study. Patients complete a range of swallowing and voice outcome measures completed prior to reconstructive surgery, two weeks post-surgery and six months post-surgery. The aim of this is to identify what changes in voice and swallowing ability after an operation and if it improves voice and swallowing or makes them worse. These outcome measures will also be related to the cause of airway stenosis and type of operation to find out if swallowing and voice problems vary.

**Implications for clinical practice:** The results of both studies will help to design a care pathway for airway stenosis patients that is individualised and robust. This will integrate the likely impact on swallowing and voice of both the diagnosis and the surgery. Further studies are also planned to investigate issues flagged by patients in the focus groups/interviews. Given the limited evidence base currently available for these patients this work will help to guide research-driven clinical judgments.

**Patient and Public Involvement:** I have a patient advisory group who helped me design the research and remain actively involved (in person meetings and email).

Contact to find out more: [gemmaclunie@nhs.net](mailto:gemmaclunie@nhs.net) @gemmaclunie

### **Lee Bolton, Clinical Lead Speech & Language Therapist**

**Project title:** Swallowing in acute exacerbation of Chronic Obstructive Pulmonary Disease (COPD)

**Addressing research priorities:**

**Adult #4** What is the prevalence and nature of dysphagia in adults with respiratory conditions over time? Referring to the RCSLT research priorities helped in defining the research question in the early stages (i.e. defining the gap between theory and practice), and subsequently in driving and supporting the application for the research grant.

**Outline of project:** Dysphagia has been demonstrated in stable COPD and may lead to chest infection through aspiration. However, it is not known if aspiration is worse during an acute exacerbation or if this prolongs the infection and increases length of stay.

Preliminary data and clinical experience suggest aspiration may be under-detected in patients with acute

exacerbation of COPD (AECOPD). However, there are no reliable studies on objective swallowing impairment, and specifically aspiration, during the acute exacerbation phase. This is important because the incidence of aspiration may be higher during an acute exacerbation and may prolong the infection, affect the rate and level of recovery, increase length of stay, and increase susceptibility to future exacerbations. Our study will develop and test the feasibility of a methodological framework to evaluate the role of dysphagia in AECOPD. Specifically, we will explore whether it is possible, in practice, to collect objective clinical data on respiratory and swallowing function in people admitted with AECOPD and again in the early recovery period. This will include ascertaining the acceptability of the proposed study design from the patient's perspective by measuring the comfort and ease of participating in data collection.

**Implications for clinical practice:** Understanding and identifying which people with AECOPD are at most risk of aspiration may in future lead to the development of specific screening methods and targeted interventions that reduce hospital admissions and length of stay, and improve clinical and quality of life outcomes.

**Patient and Public Involvement:** We are intending to conduct focus groups to collect the views of patients with COPD and their carers about investigating swallowing problems at this time point, as well as the research design and dissemination, in order to inform a future main study.

**Contact to find out more:** [leebolton@nhs.net](mailto:leebolton@nhs.net) @L33bolton

### **Elizabeth Whitehead, Specialist Speech and Language Therapist**

**Project title:** An exploratory study into healthcare professional's perceptions of using flavoured foam with adults who have dysphagia.

**Addressing research priorities:**

**General #5** Does oral sensory stimulation improve health and wellbeing outcomes of children and adults with dysphagia?

**Adult #10** How does modifying the texture, flavour and temperature of food improve health and wellbeing outcomes and patient experience in adults with dysphagia?

**Outline of project:** There is currently little research into the use of flavoured foam with adults with dysphagia, despite apparent widespread use of devices that produce flavoured foam from liquids with people with dysphagia in parts of Europe. This small scale project, aims to explore current perceptions and experiences of using flavoured foam with dysphagic adults through a series of interviews with healthcare professionals. Transcripts will be analysed to identify key themes. Results will inform future research in this area.

**Implications for clinical practice:** A better understanding of the use of flavoured foam with adults who have dysphagia.

**Contact to find out more:** [elizabeth.whitehead@cntw.nhs.uk](mailto:elizabeth.whitehead@cntw.nhs.uk)

### **Razvana Shah, Macmillan Principal Speech & Language Therapist**

**Project title:** Will respiratory examination skills for senior dysphagia trained Speech & Language Therapists increase confidence levels in their dysphagia practice with aspirating and high risk of aspirating dysphagic patients

**Addressing research priorities:** This project impacts on almost all the research priorities listed.

**Outline of project:** This MSc Advanced Clinical Practice project involves onauguration of an educational

and training programme to equip senior SLTs with respiratory examination and diagnosis skills. A paradigm shift in dysphagia is required, to adjust SLTs conceptual framework of dysphagia. Given that dysphagia practice aims to facilitate a safe swallow to prevent patients developing aspiration pneumonia; then the dysphagia / pulmonary connection becomes overt. Augmenting the clinical swallow examination with respiratory examination skills would be a natural extension of the swallow assessment and part of the continuum that compliments dysphagia practice. It would also provide a key outcome measure determining the dysphagia practitioner's objective of ensuring safe, aspiration pneumonia free oral nutrition for patients.

**Implications for clinical practice:** SLTs anxieties and confidence regarding aspiration and potential detriment to patients, due to their dysphagia practice, can be assuaged, through this new paradigm. It will facilitate calibrated clinical reasoning in dysphagia practice. The therapeutic alliance between SLT and patient / significant others will be strengthened, enhancing patient QoL.

**Contact to find out more:** [razvanashah@nhs.net](mailto:razvanashah@nhs.net)

**Suzanne Slade & Fiona Robinson, Consultant Speech and Language Therapists and directors of SVS Training Ltd**

**Project title:** Respiratory Muscle Strength Training with Dr Christine Sapienza and Bari Hoffman

**Addressing research priorities:**

**Adult #8** Can expiratory muscle strengthening (training exercises to increase the strength of respiratory muscles for improving cough and swallow functions) reduce chest infections in (a) head and neck cancer and (b) stroke patients with dysphagia?

Referring to the RCSLT research priorities certainly influenced us when we were considering our programme of training events

**Outline of project:** In 2019 Dr Christine Sapienza lead three workshops to share her expertise of Respiratory Muscle Strength Training (RMST). One day workshops were held across three venues in London, Birmingham and Cardiff with 130 therapists from a range of clinical specialisms attending the training. Dr Sapienza presented evidence on the use of RMST on swallowing, airway protection and voice in people with Parkinson's disease, the sedentary elderly, those with multiple sclerosis, after stroke and young healthy adults. Bari Hoffman described the application of RMST with instrumentalists, professional voice users and those with clinical voice disorders. Practical sessions enabled therapists to learn how to use the device and how to implement RMST programme with their patients.

**Implications for clinical practice:** The feedback that we received indicates that therapists feel inspired to trial and evaluate RMST in their clinical practice.

**Contact to find out more:** [info@svsassociates.co.uk](mailto:info@svsassociates.co.uk) @\_SVS\_Associates [www.svsassociates.co.uk](http://www.svsassociates.co.uk)