EXPLORING SPEECH AND LANGUAGE THERAPISTS' OPINION ON THE USE OF LARYNGEAL ULTRASOUND IN CHILDREN AND YOUNG PEOPLE

Edwards, L.(1), Viviers, M.(1,2), & Ma, J., K-Y. (1)

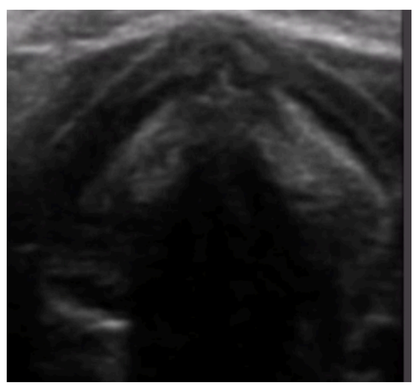
1. Clinical Audiology, Speech and Language Research Centre, Queen Margaret University, UK
2. Imperial College London

INTRODUCTION

The use of ultrasound to identify vocal fold movement impairments (VFMI) in infants and children is not novel but is recognised as a useful, minimally invasive, low-risk tool [a, b]. However, the use of ultrasound by speech and language therapists (SLTs) is a relatively new scope of practice [c]

In this patient and public involvement and engagement (PPIE) study, speech and language therapists' responses offer insight into SLTs potential use of ultrasound as a point-of-care tool for assessing vocal fold mobility and as an adjunct tool to the assessment of voice and swallowing

METHODS



- Mixed-method survey research design
- 18 qualitative and quantitative questions
- Online survey of HCPC registered paediatric SLTs working in the United Kingdom
- Survey shared via social media and professional networks

RESULTS

26 paediatric SLTs responded

Respondents background

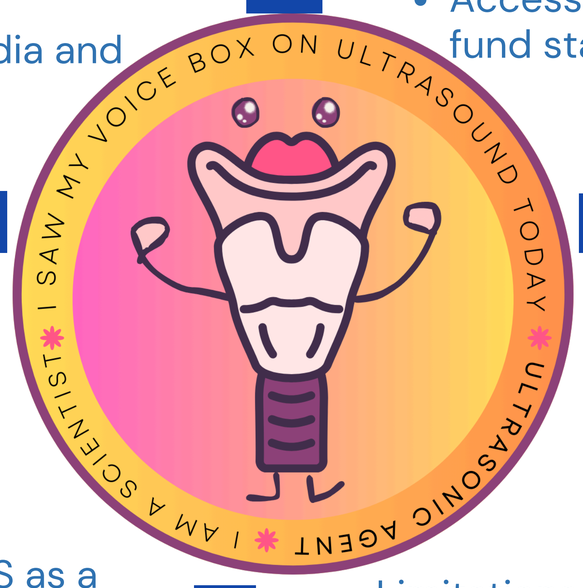
- 67% work in acute settings
- 92% NHS Band 7 or above
- 54 % 11 - 20 years experience

VFMI and laryngeal ultrasound (LUS)

- 88% clinicians noted at least one child with suspected VFMI on caseload in last 12 months 20% reported > 20 cases
- 12% reported current access to LUS
- 96% acknowledge how LUS would be a useful adjunct tool in monitoring & screening VFMI in clinic practice

Areas identified as a priority before clinical implementation

- Access to appropriate training and supervision (81%)
- Recognition and development of scope of practice (58%), including guidelines and service operation policies
- Access to funding to implement services (54%), i.e., fund staffing, training and equipment



DISCUSSION

- The results of this study highlighted the clinical population that might benefit from developing LUS as a clinical tool for SLTfor screening and monitoring VFMI
- The need for a robust paediatric LUS protocol for SLT in clinically relevant cohorts is highlighted
- In addition to the development of knowledge and skills of LUS, other areas such as scope of practice, training and funding will also need to be considered in clinical implementation
- The study has highlighted the importance of including stakeholders to inform the development of research for patient benefit
- The need to apply clinically relevant research from bench to bedside to improve outcomes is demonstrated

LIMITATIONS AND FUTURE DIRECTIONS

- Limitations - the relatively low number of participants and high representation from acute SLTs. These clinicians may have more access to the wider MDT to support VFMI assessment & monitoring, compared to community or outpatient teams. This still, however, highlights the importance of SLT-led point-of-care ultrasound
- Other research outputs from the PLUS (**P**aediatric **L**aryngeal **U**ltra**S**ound) project are underway, including protocol feasibility results and sharing parent PPIE voices
- Next steps:
  - application of the PLUS protocol in clinically meaningful settings and cohorts
  - normative study
  - clinician training & reliability

References: a. Viviers et al, 2022; b. Hamilton et al., 2021; c. Allen et al., 2021

CONTACT: Dr Joan Ma Email: jma@qmu.ac.uk

Swallow Vision Paeds

Acknowledgements: Thanks to Queen Margaret University Innovation Fund for funding this project. Thank you to the clinicians that took time to complete the survey and offer feedback.

Queen Margaret University
CLINICAL AUDIOLOGY, SPEECH AND LANGUAGE RESEARCH CENTRE

PAEDIATRIC LARYNGEAL ULTRASOUND (PLUS) PROJECT

NHS
Imperial College Healthcare
NHS Trust