Exclusion criteria:
• Participants
Methodology
Functional dysphonia most prevalent voice disorder seen by
Principles [5,6]
Functional dysphonia preliminary evidence
suggests that intensive treatment improves select voice outcomes [4,10,16].

Aim
Compare impact of intensive treatment vs. standard treatment on perceptual and acoustic parameters for individuals with functional dysphonia.

Background
Functional dysphonia most prevalent voice disorder seen by

Evidence for intensive voice treatment
• Intensive voice treatment consistent with motor learning principles [5,6].
• Roy [2] emphasises need for further research regarding application of such principles.
• Strong evidence for intensive models for some dysphonias (i.e., LSVT LOUD in Parkinson’s Disease).

Standard: 1 session/wk for 8 weeks
Intensive: 4 sessions/wk for 2 weeks
( n=7)
( n=7)

Mean age (yrs)
53.4 (SD 13.7)
56.1 (SD 11.4)

Gender
Intensive
( n=7)
Standard
( n=7)

Female
7 female
7 female

Procedure
AB A RCT design
• ENT assessment via nasendoscopy, Micromor & Rammage scale to classify dysphonia [12].
• Random concealed allocation to either treatment group (N.B last 3 participants block randomised into intensive group).

Participant inclusion criteria
• 17 adults randomised, functional dysphonia
• 14 participants’ data analysed
Exclusion criteria:
• <18 years age
• Cogmt impairments
• Neurological pathology
• Vocal fold malignancy
• Laryngeal surgery
• Polyps, granuloma, cyst
• Conversion dysphonia
• Pregnancy

Recruitment
56.1 (SD 2.0 yrs)
6 female, 1 male

Perceptual Results:
• Within group differences:
  • Roughness (p = 0.017) was rated significantly higher in the intensive group post treatment compared to standard treatment
  • Severity (p = 0.023) and breathiness (p = 0.017) were rated significantly higher in the intensive group pre treatment compared to standard. Reliability
  • Intra-rater agreement was acceptable across all attributes measured (with exception of breathiness), with a mean intra-class correlation coefficient of 0.78 across measures.

Intensive therapy treatment model may potentially improve
treatment attendance & outcomes [4]

Individual variability
• Variation between individuals for acoustic and perceptual outcomes following both treatments, no clear pattern regarding outcomes and patient characteristics.

Future Directions
• Speech pathology services may wish to potentially explore implementing high intensity voice treatment models (e.g., 9 sessions over 2 weeks) for functional dysphonia using a research framework until further research is undertaken.

Discussion of Findings
Why limited significant changes?
• Lack of statistical significant improvement for acoustic parameters may be due to:
  • High intra-subject variability
  • Small sample size & reduced statistical power
  • Debate remains regarding the reliability, validity, sensitivity and specificity of instrumental techniques in voice disorders [4,14, 16].
  • Intermittent nature of functional dysphonia [37]

References