

Context setting

Professor Pam Enderby OBE
Emeritus Professor, University of Sheffield

Overview-

The importance of appropriate management of dysphagia

Pam Enderby- Professor Emeritus
School of Health and Related Research
University of Sheffield

p.m.enderby@sheffield.ac.uk



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Sheffield.

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Definition of Dysphagia

- “Difficulty swallowing (**dysphagia**) means it takes more time and effort to move food or liquid from your mouth to your stomach.”

Estimates of Dysphagia Prevalence

- Stroke
- Head/neck cancer
- Acquired Brain injury
- Brain or CNS Cancer
- Respiratory conditions
- Following cervical spinal surgery
- Progressive neurological diseases
- Parkinson's Disease and Dementia
- Developmental disorder (carried on into adulthood)

Stroke

**Stroke
200/100,000 per
UK population
each year
affected by
stroke (Mann et
al 1999)**

**Studies report
an incidence of
dysphagia of
between 40%
and 78%**

**Of those with
initial dysphagia
following
stroke 76% will
remain with a
moderate to
severe
dysphagia and
15% profound**

Progressive Neurological Disease

Dysphagia can be an initial symptom in a small number of people with progressive diseases such as Parkinson's disease, multiple sclerosis and motor neurone disease, **but the majority** will develop dysphagia with progression of the disease

200/100,000 UK population have dysphagia due to Parkinson's disease (Hartelius and Svensson 1994). More than 90% of those with motor neurone disease will develop dysphagia

Chronic Obstructive Pulmonary Disease

Around 2% of the whole population – 4.5% of all people aged over 40 – live with diagnosed COPD.

27% (McKinstry et al 2009)

Dementia

> 850,000 in UK

68% of those with dementia in homes for the aged have dysphagia (Steele 1997)

Adult Learning Disability

5.27% of all adults with a moderate to severe learning disability

Nursing home residents/Frail Elderly

- Between 50 and 75% of nursing home residents

Estimates of Prevalence of Swallowing Difficulties

- Presbyphagia refers to age-related changes in the swallowing mechanism in the elderly
- Sarcopenic dysphagia is difficulty swallowing due to loss of muscle mass and strength.

Both are associated with increasing age (Wakabayashi, 2014).

Does dysphagia matter?

The type and severity of dysphagia has been associated with:

- *the risk of pneumonia* (Bray et al., 2016; Palli et al., 2017; Masrur et al., 2013; Titsworth et al., 2013; Finlayson et al., 2011; Westendorp et al., 2011; Lakshminarayan et al. 2010; Sellars et al., 2007; Hinchey et al., 2005; Martino et al., 2005)
- *mortality* (Ingeman et al., 2011; Koennecke et al., 2011; Katzan et al., 2003; Vernino et al., 2003)
- *poor outcomes* (Turner et al., 2015; Middleton et al., 2011; Bravata et al., 2010;)
- *costs* (Katzan et al., 2007; Odderson et al., 1995)

Levels of Intervention

- Assisting all individuals to enjoy mealtimes
- Being alert to **identify** swallowing difficulty
- Identifying the **level of risk** of anybody with a swallowing difficulty
- Screening to identify the particular difficulty and referring forward if necessary
- Detailed assessment by speech and language therapists

(Competency framework is to be addressed later)

Summary of the Literature

Bray et al. (2016) interrogated the Sentinel stroke audit data of 63,650 patients admitted with acute stroke, (88%) had a dysphagia screen, and (39%) a comprehensive dysphagia assessment (SLT).

Patients with the longest delays in dysphagia screening and SLT dysphagia assessment had a higher risk of stroke associated pneumonia (SAP).

The risk of SAP increased with delays in SLT dysphagia assessment, with an absolute increase of pneumonia incidence of 1% per day of delay.

The Tragedy of the Commons

Out comes of common ownership

“If everybody owns it, it’s as if nobody owns it.”



Economics for Leaders

#DysphagiaResearch



360

SLTs

helped prioritise the final questions



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30 research questions have been identified as areas of priority, published in 3 lists

**10
Paediatric
Questions**



**10
General
Questions**



**10
Adult
Questions**



Top Ten Adult Dysphagia Research Priorities

- 1 Does the use of thickener in fluids reduce aspiration pneumonia and/or improve hydration and/or quality of life in adults with dysphagia?
- 2 What is the feasibility of predicting aspiration pneumonia (pneumonia associated with food or liquid going into the lungs rather than the digestive system) in adults with dysphagia who have capacity to consent and are at risk of aspiration on all food consistencies?
- 3 Are training programmes for carers/staff in eating, drinking and dysphagia in dementia effective in (a) improving referrals to speech and language therapy, (b) reducing hospital admissions for dysphagia-related illness and (c) improving health and wellbeing outcomes for people with dementia and dysphagia?
- 4 What is the prevalence and nature of dysphagia in adults with respiratory conditions over time?
- 5 What is the prevalence and nature of dysphagia in different types and stages of dementia when compared with normal ageing?
- 6 Do interventions to promote oral hygiene improve health and wellbeing outcomes in adults with dysphagia following a stroke?
- 7 What is the clinical and cost effectiveness of modified diets and/or thickened fluids for elderly adults with dysphagia?
- 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?
- 9 What is the role of the speech and language therapist in end life care for people with dysphagia?
- 10 How does modifying the texture, flavour and temperature of food improve health and wellbeing outcomes and patient experience in adults with dysphagia

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Dysphagia: Top 10 adult research priorities

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Top Ten Paediatric Dysphagia Research Priorities

- 1 Are oro-motor therapy techniques effective and cost-effective in improving eating and drinking and health outcomes for children and young people with non- progressive neurological conditions?
- 2 Does cervical auscultation (listening to the sounds that accompany swallowing using a stethoscope placed on the neck) improve (a) identification of swallowing difficulties in children, and (b) carer's understanding of children's swallowing when they listen to the auditory feedback whilst their child is swallowing?
- 3 What is the most effective way to manage the transition from tube feeding to oral feeding in terms of health and wellbeing outcomes in premature infants?
- 4 What is the psychosocial impact of tube feeding on (a) the carers of premature infants and (b) the bond between carers and premature infants who are tube fed?
- 5 Is cutting tongue tie effective and cost-effective in terms of feeding outcomes in infants with tongue tie?
- 6 Is graded exposure effective and cost-effective in improving health and wellbeing outcomes for children with behavioural and/or sensory feeding difficulties?
- 7 Is feeding via a gastrostomy tube effective in improving health and wellbeing outcomes of (a) children with neurological conditions and dysphagia and (b) parents of children with neuro-disability and dysphagia?
- 8 What is the typical pattern of development of breastfeeding in premature babies?
- 9 What is effectiveness of the Neonatal Oral-Motor Assessment Scale (NOMAS) in identifying and managing sucking difficulties in infants?
- 10 What is the clinical and cost effectiveness of speech and language therapists training to improve outcomes for children with cleft palate and eating and drinking difficulties?

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Dysphagia: Top 10 paediatric research priorities

- 1. Are oro-motor therapy techniques effective and cost-effective in improving eating and drinking and health outcomes for children and young people with nonprogressive neurological conditions?
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Top Ten general, non-age group specific Dysphagia Research Priorities

1 Do people with dysphagia and/or their families/carers carry out recommendations to improve the safety/effectiveness of swallowing at meal times? What strategies are effective to improve compliance with recommendations for postural changes?

2 What is the impact of thickening fluids on the physiology and wellbeing of (a) children and (b) adults with dysphagia?

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

4 Are caregivers aware of how to identify eating/drinking difficulties and the potential risks and consequences of dysphagia?

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

6 Are postural changes (e.g. different positions) effective in improving swallowing function and safety in (a) adults and (b) children with dysphagia?

7 What is the impact of shared-decision making (patient, carer and health professionals) for the modification of food textures and fluids on health and wellbeing outcomes when compared with decisions made by health professionals alone?

8 Does the use of (a) Fiberoptic endoscopic evaluation of swallowing (FEES) and (b) videofluoroscopy improve health and wellbeing outcomes for children and adults with dysphagia?

9 What is the clinical and cost effectiveness of nasogastric feeding compared to usual care in people with dysphagia to improve swallowing and quality of life?

10 What are the reported psychosocial effects of (a) nasogastric and (b) gastrostomy feeding in children and adults who are tube fed?

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Dysphagia: Top 10 general, non-age group specific research priorities

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