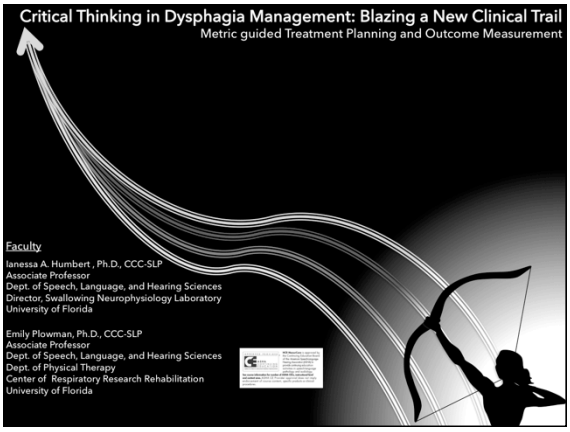


Crisis in Dysphagia Management?

Published and unpublished criticisms

Crisis in Dysphagia Management?

Rosenbek 1995
Efficacy in Dysphagia

"In 1969 an alarm sounded throughout the aphasiology community when the efficacy of aphasia treatment was challenged in a Medical World News article. Part of that article's message was that aphasic patients arrive at the hospital not walking and not talking and walk out not talking. The future of aphasia treatment was described as "bleak." Alarmed and challenged, the aphasiology community began collecting efficacy data.
No such alarm has yet sounded in dysphagia."

Crisis in Dysphagia Management?

Rosenbek 1995
Efficacy in Dysphagia

"Time, however, is short. Somewhere, someone doubtless has toyed with the idea of shattering the glass that covers the alarm bell. Dysphagia programs are simply too visible and too prosperous to be ignored or allowed to continue proclaiming their efficacy without more convincingly demonstrating it"

Published Criticisms

Campbell-Tayor 2008
Oropharyngeal Dysphagia in Long-Term Care: Misperceptions of Treatment Efficacy

"Many of the allied health professionals who are involved in the field are not required to have any background in the medical basic sciences including physiology, biochemistry, systemic pathophysiology, neurobiology, pharmacology, immunology, and others".

Published Criticisms

Campbell-Tayor 2008
Oropharyngeal Dysphagia in Long-Term Care: Misperceptions of Treatment Efficacy

"No practitioners are required to have board-certified approval before offering swallowing services"

Published Criticisms

Campbell-Tayor 2008
Oropharyngeal Dysphagia in Long-Term Care: Misperceptions of Treatment Efficacy

"In many graduate programs, dysphagia courses may not be offered or provided as a section of another course. Coursework is still not mandated in all programs and time constraints often allow only courses on the basic concepts of dysphagia."

Subject to interpretation

Examples from the internet...

Facebook professional groups

SLP #1

"I amn confident that I can feel if someone swallowed successfully versus attempts but doesn't.... I feel for the swallow and never go by sight alone. I can feel how many swallows were attempted and whether it's piecemeal swallow via laryngeal palpation. I'm still not sure what the answer is, Ianessa, if you don't have FEES or MBSS on-site. This is where our clinical judgement comes into play."

Ianessa Humbert

"I think the point is that feeling confident is not confirmation. Its ok to say that you don't know what actually happened (because it is impossible to). I think that the more we give credence to a clinical approach without instrumental, the more that we tell our administrators that we can do just fine without it. We need to be a voice for our patients to say that they need it. How do you train novel swallowing maneuvers without knowing what they are actually doing?"

SLP #1

"Ianessa, I understand your point. However, despite SLP advocacy for instrumentals, some facilities/ companies do not understand, have the budget for, or understand the need to buy the expensive equipment, even with the best reasons provided by SLPs (I should know--I've been researching and proposing all kinds of ideas to the PD and director of the facility for a year now and it's just not going to happen). It's easy for people who have easy access to instrumentals to tell other less fortunate SLPs to fight for it. So, yes, this thread does sound a little like racism...."

SLP #1 continued ...

"It's so frustrating because having a FEES on site will save companies money and provide better patient care, but they are full of businessmen who cannot see past the numbers a lot of time. So what can these clinicians do? We are forced to feel for the signs, look for the signs, do our research on the pt, his medications, and assess for stimulability for diet modifications, compensatory strategies, and exercises, all according to EBP. We have standardized swallow assessments. We can write very specific goals to measure tx progress. We have to do what we can with what we have in our facilities..."

SLP #1 continued ...

“I just hope you're not suggesting SLPs without instrumentals don't know what they're doing. Not all SLPs are careless about A&P. Not all VitalStim certified clinicians are poor analytical thinkers about electrode placement in relation to deficits. I mean no disrespect, Ianessa, I just feel like its unfair to recommend something when that something is out of reach. There has to be alternatives. I believe clinicians can hone their skills to be more accurate I'd they're driven to do so...”

SLP #1 continued ...

“While I enjoy reading your research, I feel like no one has really touched on the main issues here: We all know instrumentals are the best for diagnosing and tracking progress... That's not a new concept But what should SLPs be doing to become more accurate when instrumentals aren't accessible? How can we better train these kinds of clinicians? How can we advance the field of SLP so that expensive testing isn't the only way to get the answers?”

SLP #2

“Well SLP#1 think of it this way- the best Neurologist in the world has to order tests to look at someone's brain- they don't guess- they look at MRIs and MRAs. Etc. They have imaging and so do we. Until we have X-ray vision we need instrumentals. We shouldn't be guessing. We can have an hypothesis about a patient but We have to know the problem before we can treat effectively. Bonnie Martin Harris said at her seminar- we have to start advocating for equipment and tests and so forth. Things our patients NEED.”

Ianessa

“There need to be national standard like in other fields! it's not like some ENTs get scopes if they are lucky while others don't if the admins don't see the need. Our problem is that, as you said SLP#1, our programs are not rigorous enough for swallowing across the country. They don't influence practice at a medical center. If this was the case for GIs, SLP#1, would you be comfortable having your esophagus diagnosed and treated with no imaging bc the GI you are seeing is less fortunate? Please don't think that I can even attempt to judge which SLPs are smarter based on having instrumental evals, I don't think that is the question (nor do I care to). Nor is the question whether VS certified folks are more or less critical thinkers.”

Ianessa

“The issue is that a rising tide lifts all boats. So if we can get everyone to think more critically and get everyone equipment then we hope the effect on pt care improves across the board. As a field, we can't just "make do" for the long hall.”

Any of this sound familiar?

What are your thoughts on these published and unpublished criticisms?

How does the ACA impact dysphagia management?

Health Care Reform Impact
"Obamacare"

Current Healthcare Climate: What Does it Mean for SLPs Managing Patients With Dysphagia?

Nancy Swigert
Baptist Health Lexington-
Speech-Language Pathology
Lexington, KY
Swigert & Associates
Lexington, KY

Health Care Reform Impact
"Obamacare"

Current Healthcare Climate: What Does it Mean for SLPs Managing Patients With Dysphagia?

The healthcare community's goal:
Reduce costs, produce better patient outcomes.

Forster et al. (2012): "The nation's quality and cost problems are rooted in the dominant fee-for-service payment system, which has created a healthcare 'production' model driven by volume and based on incentives to do more, rather than to do better"

Health Care Reform Impact
"Obamacare"

Current Healthcare Climate: What Does it Mean for SLPs Managing Patients With Dysphagia?

The fee-for-service payment system:
Demand that certain outcomes be reached in order to be paid and that negative outcomes (e.g., readmission, infection) be decreased to avoid penalties.

Health Care Reform Impact
"Obamacare"

Current Healthcare Climate: What Does it Mean for SLPs Managing Patients With Dysphagia?

As a profession, we theoretically applaud the application of evidence-based standards; however, we sometimes have difficulty coming to agreement on what the evidence-based standard should be...

Health Care Reform Impact
"Obamacare"

Current Healthcare Climate: What Does it Mean for SLPs Managing Patients With Dysphagia?

Our field lacks agreement on standardization of terminology used by SLPs in describing feeding and swallowing disorders.

For example, one clinician's "flash penetration" is another clinician's "high penetration".

Instrumental exams vary widely, with studies supporting the lack of inter and intra-rater reliability (McCullough et al., 2000, 2001).

Dual Process Theory

Humans process information using two distinct systems.

(Croskerry 2009; Croskerry 2009)

System 1 | System 2

Dual Process Theory

System 1	System 2
Intuitive Fast Automatic Derived by developing rules of thumb, shortcuts, patterns	Analytical Strategic Involving careful, rational evaluation of available evidence

Dual Process Theory in Clinical Decision Making

System 1

System 1 processing, in clinicians, is developed through experience, repetition, formal academic training, and observing the behaviors of other clinicians

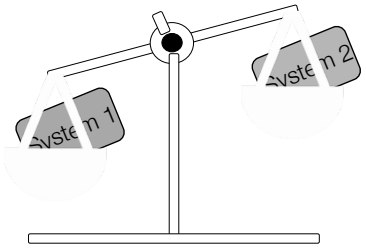
(Bate, Hutchinson et al. 2012)

Dual Process Theory in Clinical Decision Making

System 1

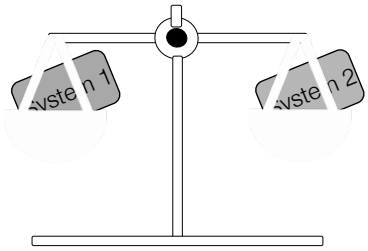
Early Clinical Experience:
Internships
Clinical Fellowships
Early Independent Periods
Switching to a new population

Dual Process Theory in Clinical Decision Making



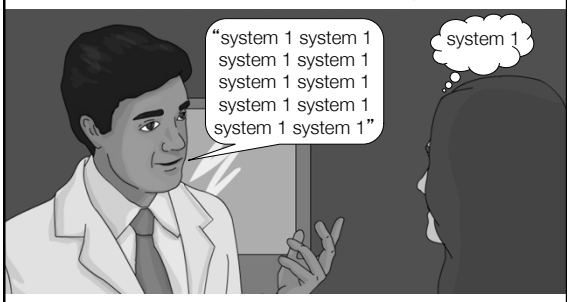
Croskerry et al (2009): humans prefer to use System 1 whenever possible, including in clinical situations.

Dual Process Theory in Clinical Decision Making



Bate (2012): better clinical decision-making occurs when there is a balance between System 1 and System 2 processing to avoid costly errors in care.

Bate et al (2012) also argues that critical thinking, based in System 2 processes, is missing from formal clinical training.



Clinicians quickly recognize a pattern of pathophysiologies and move intuitively into decisions about treatments that they have experience with based on anecdotal evidence of success (Bates 2012)

Domino Effect Thinking

Which do you think is dominant in clinical decision making in dysphagia management?

System 1 OR System 2

Example:

After aspiration is identified, safety is often prioritized leading immediately to compensatory strategies.

The question:
"What <u>can</u> they eat"
Often leads to testing bolus modification.

The question:
"How can they continue to safely eat ___"?
Often leads to testing postural adjustments.

Barriers to using System 2 processing for dysphagia <u>rehabilitation</u>

Slow to change, not within 1 individual's control

1. Time constraints
2. System 1 based clinical education
3. Complexity of swallowing
4. Limited understanding of physiology
5. Weak research on treatment effects
6. Poor link between VFS, FEES and Tx

Revisit:
Barriers to using System 2 processing for dysphagia rehabilitation

Could reduce impact of other barriers

1. Time constraints
2. System 1 based clinical education
3. Complexity of swallowing
4. Limited understanding of physiology
5. Weak research on treatment effects
6. Poor link between VFS, FEES and Tx

Why is this critical?

Lets look at SLP practice in the view of other rehab disciplines: PT

Problem: High risk of falling when transitioning between bed and wheelchair.

pre-treat eval	treatment	post-treat eval
View kinematics to determine problem, severity	Provide treatment in another room, while listening for signs and symptoms of falling	Review kinematics to determine treatment effects
		
Make treatment plans based on kinematics		Adjust treatment and mobility recommendations

Elucidating inconsistencies in clinical decision-making

Preliminary data:
Survey results from 49 SLPs

Table 1

Response Options	Question 1: Indicate all swallowing problems identified (%)
residue	98.0
penetration	40.8
aspiration	26.5
velopharyngeal function	20.4
base of tongue function	63.3
pharyngeal squeeze	81.6
swallow onset time	28.6
hyoid superior mvmnt	26.5
hyoid anterior mvmnt	57.1
laryngeal vestibule closure	40.8
UES	**93.9**
none	N/A

survey results

How do we apply critical thinking here?

Segment the swallow by primary goals

Two primary swallowing goals:

Airway protection	Bolus movement

How does the bolus give us clues that these goals are not being met?

Components of each?

Airway protection	Bolus movement

Table 1

Response Options	Question 1: Indicate all swallowing problems identified (%)	Question 2: Which would you target first in treatment? (%)
residue	98.0	4.1
penetration	40.8	4.1
aspiration	26.5	12.2
velopharyngeal function	20.4	0.0
base of tongue function	63.3	12.2
pharyngeal squeeze	81.6	20.4
swallow onset time	28.6	0.0
hyoid superior mvmnt	26.5	8.2
hyoid anterior mvmnt	57.1	26.5
laryngeal vestibule closure	40.8	2.0
UES	**93.9**	**49.0**
none	N/A	8.0

When asked to provide a rationale for the selected treatment target(s), many responses were not based on swallowing physiology

"Target decreasing any penetration or aspiration of foods/liquids so that the patient may increase PO intake safely"

"There is residue sitting on top of the esophageal sphincter. It could build up and then spill over into airway"

"Looks as though the bolus was thin liquid and so residue will likely increase with thicker consistencies. If the residue issue isn't addressed they will likely be NPO, if not already"

We did not ask for a physiological rationale, because we wanted to know how respondents tend to think about rationales.

These responses are examples of how focusing on the bolus, rather than the physiology responsible for moving the bolus, is common practice in dysphagia management

Others provided a physiological rationale that was not associated with the disordered function that was selected for treatment.

From one respondent who would only treat pharyngeal squeeze:

"Cricopharyngeal opening is minimal and results in significant post-swallow pyriform sinus residues. This puts the patient at risk of aspiration and should therefore be targeted first"

Does this support why pharyngeal squeeze, in particular, should be targeted in treatment?

Some respondents provided sound physiological rationales for targeting (abnormal) hyo-laryngeal movement to impact UES function

However
1. Hyo-laryngeal function is normal
2. It appears as though the UES is not relaxing, so super human hyo-laryngeal movement might not even work?