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Research Article

Speech-language pathologists' experience with nursing initiated texture modified diets in health care settings

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Abstract.
BACKGROUND: Texture modified diets (TMDs) are among the most widely used compensatory measures for managing dysphagia. TMDs are associated with significant risks involving nutrition, hydration, and quality of life. Speech-language pathologists (SLPs) are trained to evaluate and treat people with dysphagia and to assess client-specific appropriateness of TMDs. However, patients are regularly placed on TMDs by nursing staff without formal training in dysphagia and without SLP consult (Gurevich et al., 2021).
OBJECTIVE: This study explores the experience of SLPs in health care with respect to such nursing initiated TMDs with the goal of assessing the prevalence of this practice.
METHOD: SLP students, clinical fellows, and practicing clinicians ($N = 503$) were surveyed regarding their exposure to the nursing initiated TMD practice.
RESULTS: Overall, 78.9% of respondents have directly encountered the nursing initiated TMD practice, with an additional 10% having heard of it. The group most susceptible to this practice, the certified clinicians who work with dysphagia alongside nurses ($n = 461$), had a higher rate of directly encountering this practice (82.2%). Among these, the early career clinicians ($n = 104$) had an even higher direct encounter rate at 87.5%.
CONCLUSIONS: Findings show that nursing initiated TMDs are pervasive in United States (U.S.) health care, and SLPs are shown to regularly face this issue in their work settings as soon as they enter the workforce. Given negative outcomes associated with TMDs, patient care would be best served if decisions to implement TMDs were made by personnel with training in dysphagia.

Keywords: Dysphagia, texture diet modification, health care settings

1. Introduction

Dysphagia, particularly in older adults, is associated with disability, malnutrition, dehydration, pneumonia, institutionalization, hospital length of stay and cost, and mortality (Alagiakrishnan et al., 2013; Makhnevich et al., 2022; Namasivayam-Macdonald et al., 2019; O'Keeffe et al., 2023; Paranji et al., 2016; Thiyagalingam et al., 2021). A widely used, even most widely used by some accounts, compensatory measure for dysphagia is texture-modified diet [TMD] (Benson & Barnes, 2022; Ciucci et al., 2016; Logemann et al., 2008; McCurtin et al., 2020; O'Keeffe, 2018; O'Keeffe et al., 2023; Streicher et al., 2018; Thiyagalingam et al., 2021). In long-term care, estimates of residents on TMDs range from 30% to 47% (Keller et al., 2012; Namasivayam-Macdonald et al., 2019; Vucea et al., 2019), with some concerns about the overprescription of this intervention (e.g., Groher & McKaig, 1995; Logemann et al.,

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2008; Milte et al., 2017). Additionally, there is a tendency for TMD orders to remain in effect long-term, past the rehabilitation stage and even post discharge (Gorham-Rowan, 2014; Groher & McKaig, 1995; O'Keeffe et al., 2023).

Although widely used, TMDs can be associated with negative outcomes such as malnutrition and reduced caloric and protein intake, reduced appetite, reduced quality of life, increased social isolation, and increased incidence of adverse events (Makhnevich et al., 2022; O'Keeffe et al., 2023; Shimizu et al., 2021; Wright et al., 2005). Significantly, there is limited evidence that TMDs are effective in reducing morbidity and mortality (Alagiakrishnan et al., 2013; Makhnevich et al., 2022), with the evidence for thickening fluids for managing dysphagia being particularly weak (Andersen et al., 2013; Beck et al., 2018; Hansen et al., 2022; McCurtin et al., 2020).

The Royal College of Speech and Language Therapists [RCSLT] (2024) published a position paper on the use of thickened liquids calling for careful consideration and informed consent prior to prescribing thickened liquids for managing dysphagia. Clinicians trained to evaluate and treat people with dysphagia can determine the appropriateness of TMDs on a case-by-case basis. However, quite frequently TMDs are initiated by health care professionals with little training in dysphagia. Gurevich et al. (2021) brought to light this previously unexplored yet common issue in U.S. health care, one of nursing initiated TMDs without SLP consult: Only 31.4% of surveyed nurses ($N = 298$) would avoid downgrading diets without consult, and 73.5% would avoid upgrading, while very few nurses strongly agreed that they had adequate formal education or training on dysphagia. The increased acceptability of downgrading without training or consult of dysphagia specialists is attributed to the mistaken assumption that "downgraded" textures, intended to compensate for swallowing dysfunction and promote a safer intake, must always be safer.

Hirzel et al. (2020) found that 94.8% of certified SLPs ($N = 135$) with dysphagia experience working in health care settings in the U.S. reported having encountered or heard about nurses citing permission to downgrade diet textures without consult. This phantom permission, however, is not supported by any documentation or guidelines that could be found in literature (Gurevich et al., 2021). Given how long it takes practice to catch up with research,[1] discrediting the claim of a formal permission to downgrade diet textures without dysphagia training while showing how pervasive the practice that relies on this permission is, is not in itself expected to have made a substantial impact since 2021. It was hoped that, armed with the knowledge that such a pervasive practice is not based in clinical thinking or supported by formal guidelines, clinicians on the ground can be empowered to proactively affect the practice in their settings. However, it is unacceptable to expect clinicians to spearhead advancing to safer practices (e.g., by providing interprofessional education) without supporting them directly (e.g., by way of clearer guidelines including in terms of roles within interdisciplinary teams that manage dysphagia).

The goal of the present study is to support clinicians on the ground in two ways: First, to show them how truly pervasive the practice related to TMDs is in the field, to let them know they are not alone[2], and that the policy that is regularly cited in health care settings is not a formal one that is recognized by any organization or publication. Second, we hope to affect change at higher levels by drawing attention to the larger picture issues related to a practice of TMDs prescribed by personnel without training in dysphagia. That is, we hope to emphasize the impact on patient care and safety, on our practice as dysphagia specialists who provide support for our clinical decisions, and on ethical considerations. To this end, the present study extends the work of Hirzel et al. (2020) to a larger group of clinicians in order to investigate the exposure of SLPs to the practice of nursing-initiated TMDs supported by the phantom permission to downgrade. Specifically, we aim to answer the following questions:

(1) What portion of clinicians encounter nurses downgrading unilaterally?
(2) Is this practice encountered similarly across years of clinical experience?
(3) Which health care settings is this practice encountered in?

2. Methods

A cross-sectional survey design was used to collect descriptive information. The research was approved

[1] The often cited length of time for research to reach clinical practice is 17 years (Morris et al., 2011).

[2] We presented on this topic at several state and national conferences in the U.S. and the reaction from clinicians was regularly one of both surprise that others deal with the same issues, and relief that they are not alone.

by Purdue University Institutional Review Board (IRB #1901021599).

2.1. Materials

The survey was in electronic form (Qualtrics, 2023) that could be filled using any device. It was accessible through an anonymous link and respondents could save their progress and finish later. Incomplete responses were automatically deleted after one week of inactivity and were not tracked. No identifying information was collected or saved. Before entering the survey, visitors were asked to agree with the statement "I am an SLP (student, CF, or CCC) and I agree to participate in this survey". The survey included four items that took participants approximately one minute to complete. (1) Participants were asked their certification level (students in medical internships, clinical fellows (CF), or SLPs with a certificate of clinical competence (CCC-SLP), and those who selected "CCC-SLP" were also asked for their years of experience. (2) Participants were asked whether they had experience with dysphagia in medical settings that include nursing staff (yes/no), (3) whether they had ever encountered a practice related to TMD where nurses may downgrade but not upgrade without SLP consult (yes/no/no, but heard about it), and (4) in what settings they encountered this practice, if they did. The analysis was conducted using Qualtrics and Microsoft Excel.

2.2. Participants

A convenience sample of 507 participants were surveyed online, four of whom did not consent leaving 503 who did: 154 in the period between January 2019 and February 2019, and 349 in the period between March 2023 and May 2023, with a pause during the pandemic and its immediate aftermath. Inclusion criteria only specified being an SLP (student, CF, or practicing). Recruitment was carried out through online discussion boards (such as American Speech-Language-Hearing Association [ASHA] online communities) and social media groups for health care (two groups with monitored or restricted memberships: "SLPs in SNFs" and "Adult Rehab Speech Therapy" on Facebook). Recruitment targeted SLPs but relied on self-identification with no formal way to confirm.

3. Results

3.1. Descriptive statistics

Of the 503 participants who consented, 7 reported they were SLP students in medical internships, 21 were CFs, and 475 were CCC-SLPs. Years of experience of the CCC-SLP participants who responded to this question ($n = 469$) ranged from 0 to 47 ($M = 15.5$, $SD = 11.0$). Of these, 110 were within the first five years of their careers, considered by ASHA to be "early career professionals" (ASHA, 2023). The mean years of experience for the early career clinicians in the data was 3.1 ($SD = 1.6$, min = 0, max = 5). The full range of years of experience of the CCC-SLP participants is in Table 1, with an additional breakdown by the two collection periods in the supplemental materials.

3.2. Analysis of responses

Overall, 78.9% (397 participants) said yes, they have encountered the practice related to TMD where nurses may downgrade but not upgrade without SLP consult and only 11.1% said they have never encountered or heard of it. Table 1 provides the full breakdown of responses by participant roles.

Arguably, the clinicians most impacted by the nursing practice in question are those who have experience with dysphagia in medical settings that include nursing staff. Of this subset of participants ($n = 486$), 394 (81.1%) have encountered the practice, and only 33 (6.8%) never encountered or heard of it. Looking only at CCC-SLPs who have experience working alongside nurses in medical settings ($n = 461$), the results are very similar: 379 (82.2%) have encountered this practice, and 31 (6.7%) never heard about it. The average years of experience of the group of 31 CCC-SLPs who have experience working alongside nursing but never encountered the practice in question is comparable to the average years of experience of the entire group of 503 participants: Mean = 15.10 ($SD = 10.8$, min = 0, max = 37).

A breakdown of responses by years of experience of CCC-SLPs in the data ($n = 475$, but only 469 responded with number of years) is in Table 1. The subset of CCC-SLP respondents were slightly more likely to have heard about the practice of nursing initiated TMDs than the full group that includes students and CFs. Early career clinicians (0–5 years of experience) were lower still in their response to never encountering or hearing about this practice, indicat-

Table 1
Breakdown of responses by participant roles and years of experience of CCC-SLP participants regarding having encountered or heard about the practice ($n = 475$)

Role	Number of participants	Not encountered or heard	Heard about it	Encountered it
CCC-SLPs (all)	475	10.3%	9.5%	80.2%
0–5 years	110	9.1%	8.2%	82.7%
6–10 years	88	13.6%	8.0%	78.4%
11–20 years	127	11.8%	9.4%	78.7%
21–30 years	100	4.0%	9.0%	87.0%
31–47 years	44	18.2%	18.2%	63.6%
Students	7	14.3%	42.9%	42.9%
CFs	21	28.6%	9.5%	61.9%
All	**503**	**11.1%**	**9.9%**	**78.9%**
Chi-square (95% confidence level)		$\chi^2(4) = 15.85$, $p = 0.003$		

ing they were more likely to have heard about this practice than the combined group of all CCC-SLPs, and more likely than the combined group of all participants. It is also worth noting that only 5 (4.8%) early career professionals who work alongside nursing ($n = 104$) have never encountered or heard about this practice.

Regarding clinicians past their early career stages, those with 6-10 years of experience were a little less likely than the full group to have heard about the practice in question. Clinicians with 11-20 years of experience were the most numerous subgroup of CCC-SLPs, and also the closest in their response rate to the full group of all participants. The 21-30 years of experience group was the most divergent from the rest with only 4% saying they never encountered or heard about the practice and were the group most likely to have directly encountered it. And finally, the 31-47 years of experience group was the smallest group in the data, and they reported the lowest exposure to the practice in question. An analysis by years of experience of data from the later collection period (from 2023) as compared to the full data shows no statistically significant differences (see Tables S1–S3 in Supplemental materials.)

Table 2 shows the health care settings in which participants indicated encountering the nursing initiated TMD downgrading without SLP consult. The practice was most encountered in long-term care (LTC) and skilled nursing facilities (SNF), followed by acute/sub-acute hospitals, then inpatient/rehab hospitals. The practice was rarely encountered in home health and outpatient settings, and even less in Veterans Affairs (VA) hospitals, private practice, and in university or research clinics.

Table 2
Settings where the TMD practice was encountered ($N = 503$)

Setting	Number of participants
University or Research Clinic	3
Private Clinic/Practice	4
VA Hospital	9
Outpatient	19
Home Health	29
Inpatient/Rehab Unit Hospital	140
Acute/Sub-acute Hospital	236
SNF or LTC	307

4. Discussion

In response to the first research question, a significant portion of clinicians encounter the downgrading practice by nursing. Only 11.1% of all respondents say they have never encountered or heard about this practice, leaving 88.9% of clinicians having encountered or heard about it. That number grows to 93.2% of all participants who have experience with dysphagia in medical settings that include nursing staff. There is no question that this practice is pervasive.

In response to the second question, it is clear that clinicians are exposed to this practice as soon as they enter the field, with 90.9% of all early career professionals reporting that they have encountered or heard about this practice, and even higher (95.2%) for those early career clinicians who work with dysphagia alongside nursing. Given that the question asks participants if they have ever heard about or encountered the practice, it stands to reason that the longer one has practiced the more likely they are to have encountered it. And in fact, the group of respondents with 21–30 years of experience bears out this prediction. However, the group that has practiced the longest

(31–47 years) had the lowest rate of exposure to this practice. This could have several explanations including the fact that most of these respondents entered the field before SLPs were the main dysphagia specialists in health care, as per Ciucci et al. (2016), required coursework in dysphagia for SLP programs only started in the 1990 s, and ASHA standards were published in 1997 (26 years ago). Clinicians in this group may also have worked with dysphagia before nursing initiated TMDs was such a pervasive practice. Regardless, given the higher rate of exposure to this practice of early career professionals, the urgency in addressing this issue is undeniable.

The third and final question concerns the health care settings in which this practice is most often encountered. It stands to reason that the settings in which SLPs are most likely to work alongside nursing staff would be the settings where this practice is encountered the most. This bears out in the data. It is in these settings that SLPs, especially early career clinicians, need the most support. Calling for additional and interprofessional education, potentially focusing on the need for dysphagia expertise to support TMD recommendation due to the risks associated with TMDs, is one sensible path, but it is insufficient. Clinical guidelines are needed to support clinicians in the field.

4.1. Limitations

Online surveys have several limitations, and the study herein has the added complication of two separate periods of collection which, along with recruitment through multiple professional and social discussion boards makes it difficult to estimate eligibility or the response rate. Although multiple submissions were prevented, and this was enforced across the collection dates, there is no way to prevent these if a participant used different devices. Self-selection bias is a limitation of all surveys (Bethlehem, 2010). Clinicians who visit professionally focused discussion boards where recruitment was carried out, and those willing to take the time to respond to surveys, may be different as a group from the general population of SLPs. Also, in order to collect a larger number of responses, the survey herein prioritized brevity over content. Information such as geographic area of respondents, experience with dysphagia management in their settings, and other specifics about their exposure to the nursing initiated TMD practice would have helped provide a fuller picture of practice patterns. With regard to location, although we did not ask for the country of origin or practice, we can assume our data mostly reflect practice patterns in the U.S. However, similar practices have been documented in Europe (Okon et al., 2024) suggesting that this is indeed a common issue in health care. Finally, information on how the nursing-initiated practice is handled by our respondents would have enhanced the discussion and will be targeted in future research.

5. Conclusion

The goal of the present study was to support clinicians on the ground in two ways: to bring to light the pervasive nature of the practice related to nursing initiated TMDs, and to call for clinical guidelines that might include training requirements for any personnel involved in initiating TMDs. The overwhelming portion of SLPs who report encountering or hearing about the practice in question is clear. Additionally, it is evident that early career clinicians, particularly those working in LTC and SNF settings, are especially vulnerable to this practice.

Articles such as this often end with a call for clarifying guidelines and increasing interprofessional education to improve patient care. Indeed, those are worthwhile goals. But who is implementing these suggestions? The ethical considerations at hand relate to professional roles, scopes, and competencies; given this, it is time for policy makers to get involved. In the meantime, a closer look at how professionals including SLPs and nurses in the field are handling the situation addressed in this article is warranted. We turn our attention to this next.

Data availability

All data generated or analyzed during this study are included in this published article.

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Conflict of interest

The authors have no conflict of interest to report.

Supplementary material

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