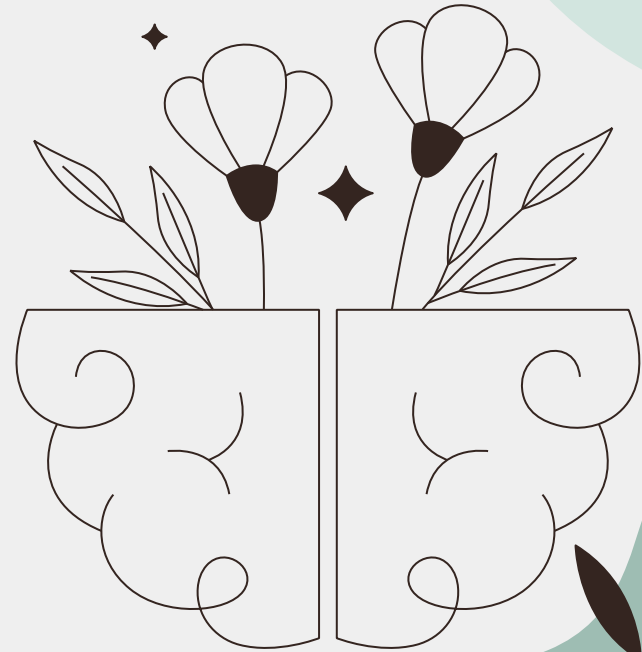


# Patient Safety on Careful Hand Feeding Among In-patient with Dysphagia

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# Introduction and current clinical situation

## Definition

Dysphagia is defined objectively as an **abnormal delay** in the transit of a liquid or solid bolus during the oropharyngeal or esophageal stages of swallowing.


(Jalil, A.A.A., Katzka, D.A. & Castell, D.O., 2015)


## Severe Complications

The clinical consequences of dysphagia directly impact patient safety, leading to:

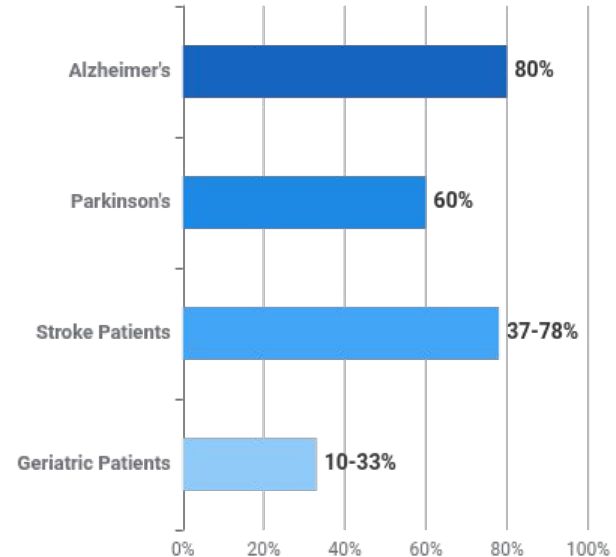
- Unintentional Weight Loss
- Malnutrition
- Dehydration

### Critical Risks:

 Choking (Death)

 Aspiration Pneumonia

## Prevalence in Vulnerable Groups



High prevalence in neurodegenerative and neurological conditions.

(Thiyagalinmgam et.al, 2021)

# Project Background



## Safety Imperative

Recent **Sentinel Events (SE)** and **Serious Untoward Events (SUE)** related to feeding errors have underscored the urgent need for clinical improvements in the ward.

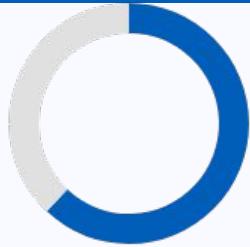


明愛醫院男病人噎死 | 溝通不足致病人不治  
林哲玄籲是升醫護臨床判斷能力

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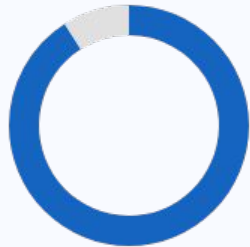
## Local Data (OLMH OA4M Ward)

March 2025



62%

of inpatients diagnosed with **Dysphagia** by Speech Therapist



91%

of ward patients were **over 65 years old**

## Project Objectives



### Enhance Patient Safety

Improve clinical practices for careful hand feeding to minimize risk.



### Correct Use of Thickeners

Ensure proper mixing and consistency of thickening agents.



### Understand the INTERNATIONAL DYSPHAGIA DIET STANDARDISATION INITIATIVE (IDDSI) Levels

Enhance clinical staff knowledge of standardized diet levels.



THE INTERNATIONAL DYSPHAGIA DIET STANDARDISATION INITIATIVE (2019)

# Methodology



## Study Design

A **Pretest-Posttest** design was utilized to measure the effectiveness of the education program on staff knowledge.



## Target Population

Focused on clinical staff in the OLMH **0A4M Ward**. Specifically targeted:

- Nurses
- Patient Care Assistants (PCAs)

## Intervention Framework (1 – 1.5 Hour Sessions)



### Knowledge

Comprehensive staff education on dysphagia risks and safety protocols.



### Demonstration

Hands-on demonstration of proper thickener preparation and consistency checks.



### Verification

Return demonstration by staff members to verify competence and understanding.



### Q & A

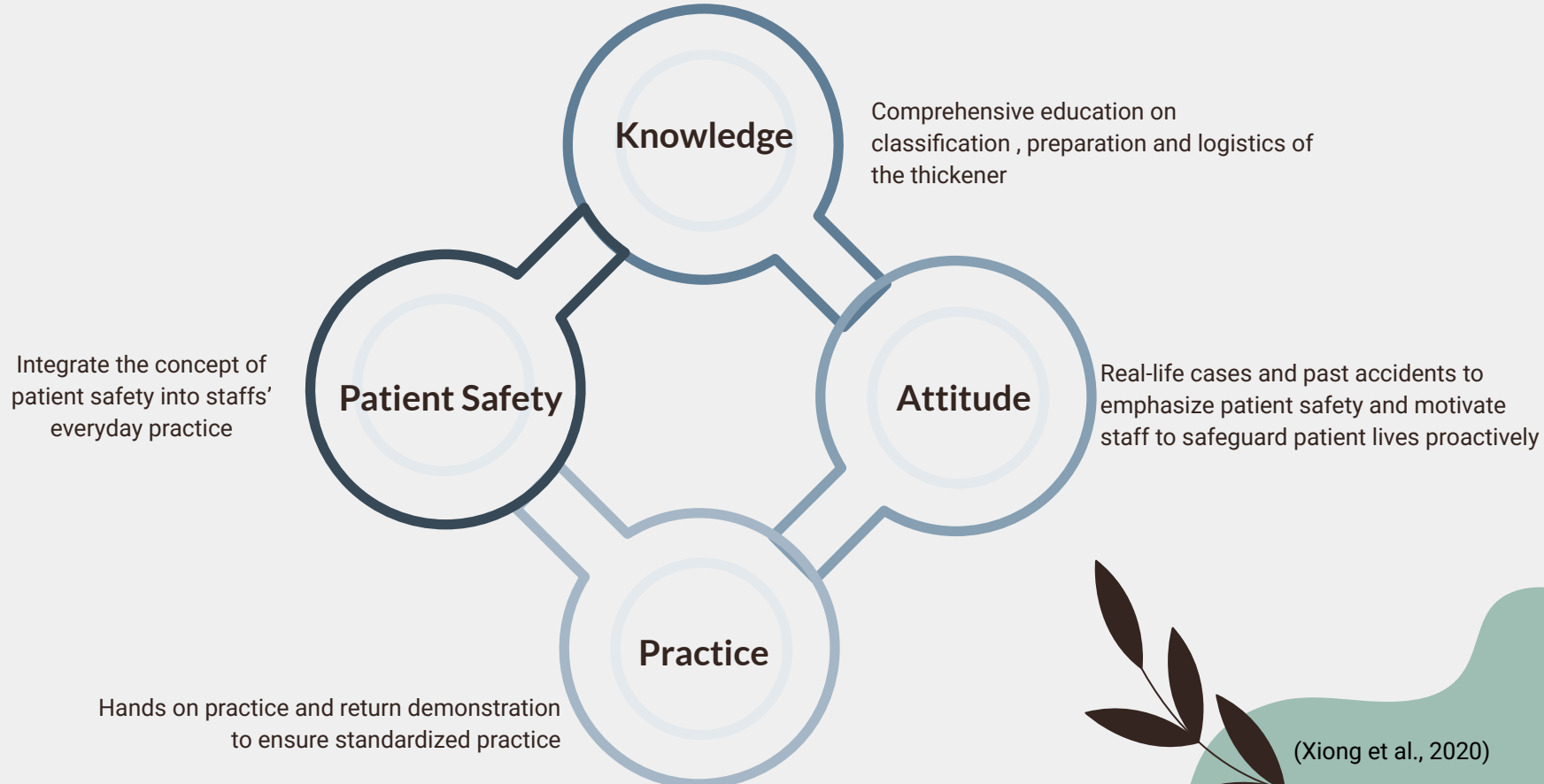
Open session for addressing specific clinical scenarios and questions.



Embedded the **Knowledge Attitude Practice Model** to motivate staff engagement

*(G Bardran 1995)*

# Knowledge Attitude Practice Model



# Staff Education



## Understanding Thickeners

Agents used to increase liquid viscosity, significantly reducing the risk of **choking** and **aspiration pneumonia** in dysphagic patients.

## Focus Areas

### Starch-Based Thickeners

Step 1  
**Add Water** → Step 2  
**Add Powder**



### Gum-Based Thickeners

Step 1  
**Add Powder** → Step 2  
**Add Water**



⚠️ Crucial mixing order to prevent clumping. Requires vigorous stirring immediately upon addition.

### Logistic of ThickenUP® Supply

#### Starch-Based Thickeners:

Replaced and supplied by WTSH kitchen

#### Gum-Based Thickeners:

Refer ST for the supply of ThickenUP® Clear



### Needs Recognition

Staff **must** verify patient needs by consulting:



Speech Therapist  
Assessments



Nursing Discharge  
Summaries



Medical Records & E-Bed  
Panels

# Project Timeline

**APR**



## **Preparation**

Preparing the training material and staff survey

**MAY**

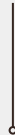


## **Education Program**

Educating the staffs on precaution in careful hand feeding

Pretest & Posttest

**AUG**



## **Reassessment**

Assess the retention of knowledge

**OCT**



## **Refreshment Training**

Reinforcement of trained knowledge

\* \*Training newcomers during orientation

# Result



## Assessment Tool

7-question knowledge assessment survey (self-reported) used to compare Pretest and Posttest results.

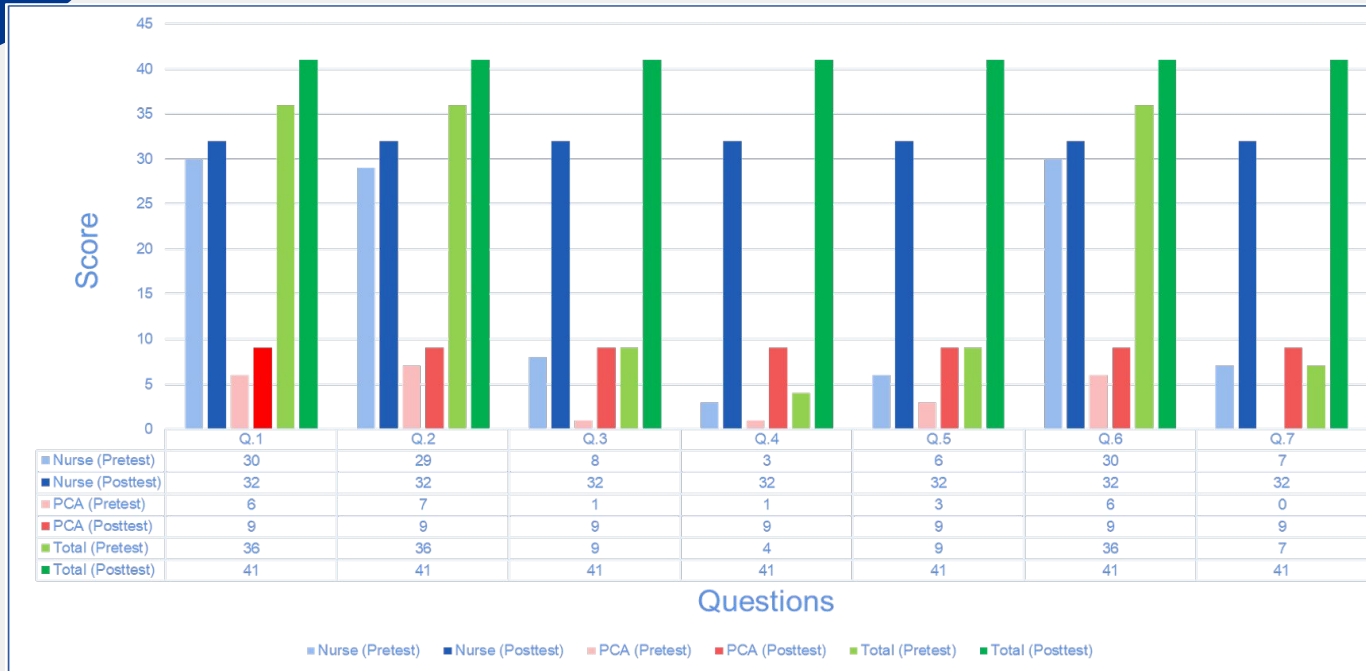
Reference: KCC Careful Hand feeding Handbook (2021)



## Study Participants

Total **n=41** staff members participated:  
32 Nurses and 9 Patient Care Assistants (PCAs).

## Key Statistical Findings: Knowledge Improvement (Pre vs. Post)



Posttest  
Competency:  
**100%**



Reassessment  
in August :  
**90.2%**



**Major improvement :**  
Q3: Need Recognition  
Q4: Thickener Preparation  
Q5: Classification  
Q7: Supply Logistic

# Sustainability and Discussion



## Retention Strategy

**3-Month Intervals:** Scheduled reassessment to prevent skill decay.  
Consolidation of initial learning.

(Baba, R. et.al, 2020 ; Oermann, M. et.al, 2021 ; Rhoda, A. & Pickel-Voight, A., 2015 ; Yen, P.H. & Leasure, A.R., 2019)



## Anticipated Challenges

**Staff Rotation** and turnover  
General attrition.  
Risk of knowledge/skill loss over time.



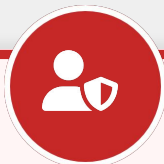
## Continuous Training

Refresher training sessions.  
Incorporated into **orientation** for newcomers.  
Follow-up education.

Addressing challenges through cyclical reassessment ensures long-term patient safety.

# Take Home Message

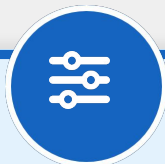
Implementing structured education and standardized practices are essential for reducing dysphagia-related risks.



## Patient Safety First

Elevating staff awareness regarding the **severe complications** of dysphagia (aspiration, choking) is a non-negotiable component of safety.

- ⚠️ **Vigilance during hand feeding is critical.**



## Systematized Care

Familiarize the logistics of **thickener supply** and reinforcing correct mixing protocols are vital for consistency.

Standardized the description and the characteristics of foods and drinks according to the IDDSI level

- ✓ **Adherence to IDDSI levels ensures every patient receives the correct consistency.**



## Improved Outcomes

Targeted education successfully closed knowledge gaps, achieving **100% competency** in staff post-intervention.

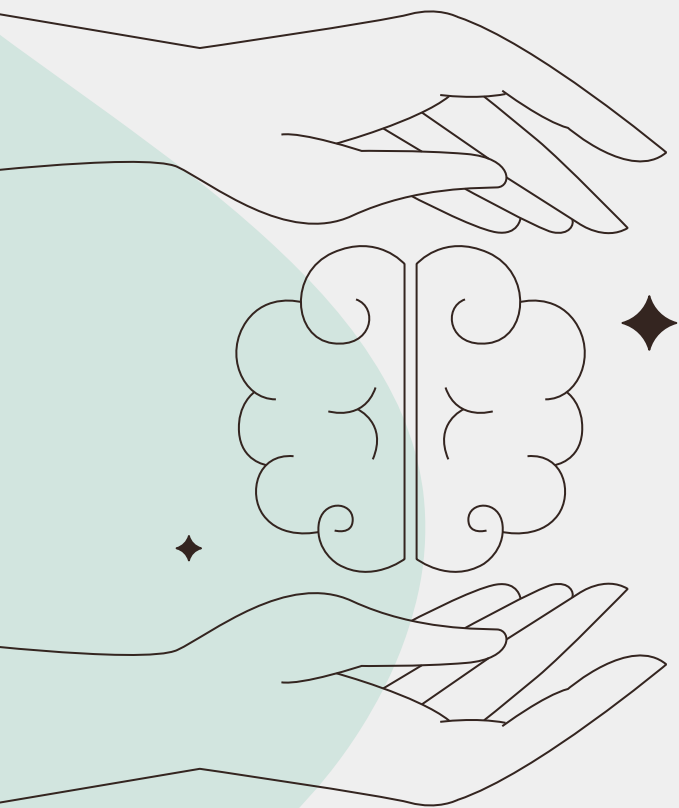
Improved staff knowledge on IDDSI level description from the point of view of a person with swallowing difficulties

- 🎓 **Continuous training is the key to maintaining these high safety standards.**

**SAFE SWALLOWING SAVES LIVES**

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# Thanks!

**Do you have any questions?**

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