

# Impact of careful hand feeding programme on feeding tube use in patients with advanced dementia

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## Introduction

- Despite the lack of evidence that tube feeding benefits people with advanced dementia and professional guidelines advocating careful hand feeding (CHF) as an alternative approach, tube feeding remains prevalent in Hong Kong and many parts of the world in this population.
- To promote quality end of care for patients with advanced dementia, a CHF programme was implemented in TWGH Fung Yiu King Hospital since February 2019.
- This study aims to compare feeding tube insertion rates before and after the introduction of the CHF programme and to evaluate the rates of change in feeding mode during the 1-year follow up period.

## Methods

- Retrospective cohort study of patients with advanced dementia admitted to TWGH Fung Yiu King Hospital with indication for non-oral feeding due to feeding problems.
- Feeding tube insertion rates were compared for those admitted prior to (January 2015-February 2017) and after the CHF programme (March 2017-June 2019).
- Patients were followed for one year to assess the rates of feeding mode change.

## Inclusion criteria

- Age  $\geq$  60 years old
- Advance dementia defined by Stage 7 on the Reisberg Global Deterioration Scale (GDS)
- Feeding problem(s) defined as (at least one):
  - Inadequate oral intake
  - Moderate to severe oropharyngeal dysphagia
  - Aspiration pneumonia

## Exclusion criteria

- Feeding tube in place at the time of index hospital admission
- Dysphagia as a consequence of ALS
- Acute stroke
- Tracheostomy
- Active cancer
- Comatose

## References

Lee YF et al. (2021) JAMDA Luk JKH et al. (2013) Hong Kong Med J

## Results

- 616 patients were identified (65.1% female, mean age 89 years, 77.3% residential care home residents)
- Feeding tube insertion rate declined from 72.0% to 50.5% after introduction of the CHF programme ( $p=.000$ ).

Fig 1. Feeding tube insertion rates before and after CHF programme

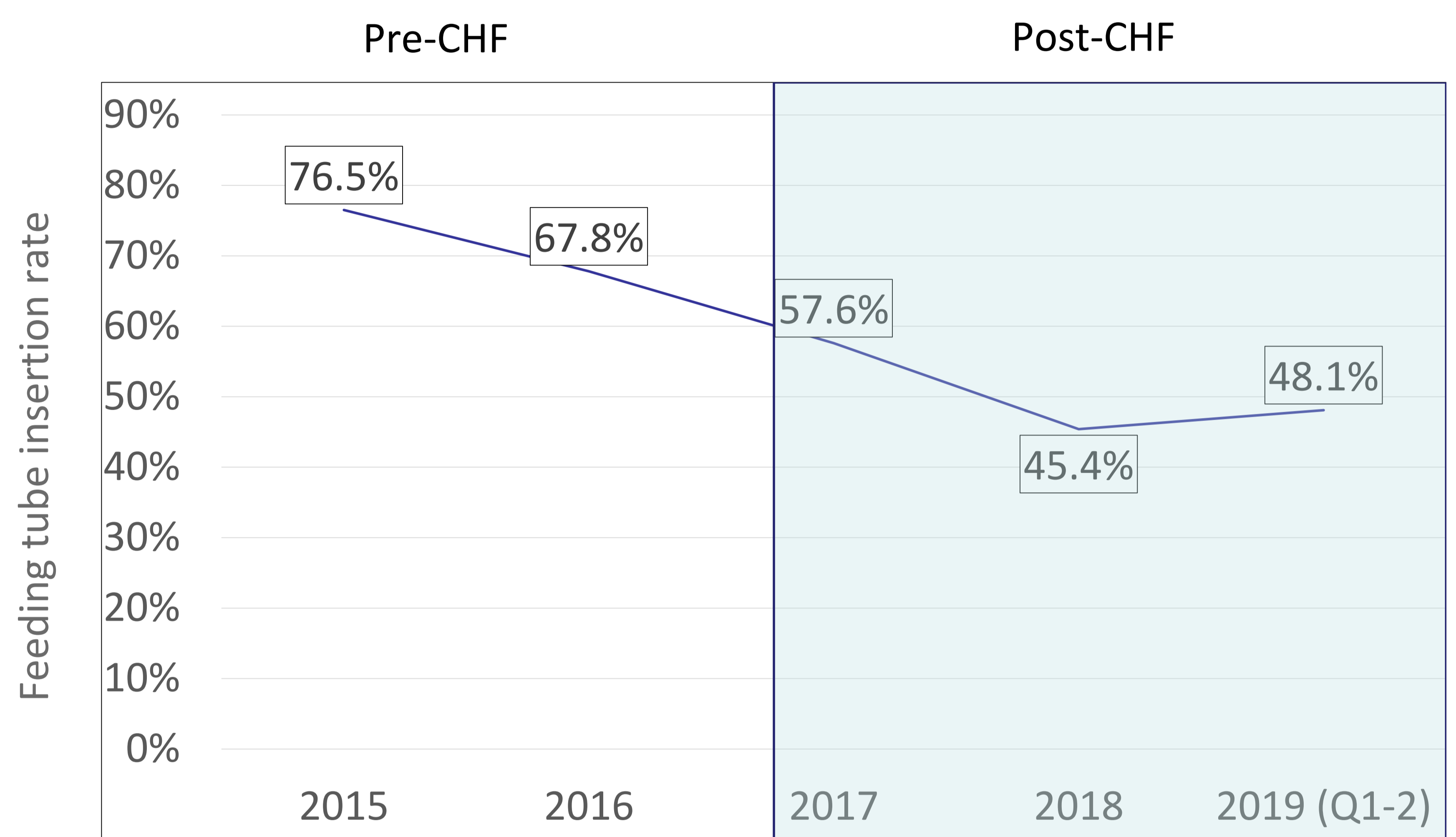


Table 1. Predictors of feeding tube insertion after multivariate analysis

Variables	P value	OR	95% CI
Careful hand feeding program	0.00	0.45	0.29-0.70
Feeding problem type			
Behavioral feeding problem (Ref)			
Oropharyngeal dysphagia	0.00	4.88	2.83-8.41
Both behavioral and dysphagia	0.00	8.48	4.23-16.83
Absent non-hospitalized DNACPR	0.00	5.57	2.25-13.83

Table 2. Rate of feeding mode change during 1-year follow up

Feeding mode change	Pre-CHF	Post-CHF
NGF at discharge	1.7%	1.1%
CHF at discharge	10.0%	8.0%

## Discussion

- Implementation of a CHF programme led to significant reduction in feeding tube insertion among advanced dementia patients with feeding problems.
- The majority of patients were maintained on the feeding mode over the 1-year follow up period.
- CHF programmes in geriatric convalescent hospitals can be an effective strategy to reduce feeding tube insertions and promote quality end of life care for patients with advanced dementia.