

Risk Factors Associated with Oral Intake Discontinuation in Hospitalized Patients with Aspiration  
Pneumonia: A Systematic Review

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20MP304

Master's Capstone Report submitted in partial satisfaction of the

requirements for the degree of

Master of Public Health

at

St. Luke's International University

Graduate School of Public Health

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## *Abstract*

**Background:** Aspiration pneumonia is a prevalent condition, and understanding the risk factors associated with discontinuation of oral intake upon discharge is crucial. This study aims to identify these factors, contributing valuable insights for optimizing the use of limited healthcare resources and enhancing patient and family care.

**Methods:** In this systematic review, data were collected through ICHUSHI using the search formula "Pneumonia-Aspiration/Thesaurus or Aspiration Pneumonia/All) and (Prognosis/Thesaurus or Prognosis/All)". Inclusion criteria encompassed Japanese patients hospitalized for aspiration pneumonia, with a clear outcome focused on the availability of oral intake. Exclusion criteria comprised instances where the text was unavailable, studies from foreign countries, and cases involving non-hospitalized patients.

**Results:** Employing this search formula, 1646 articles were initially identified, culminating in the inclusion of six articles for analysis. The investigation revealed five significant risk factors: social status (age and gender), nutritional status (Body Mass Index (BMI), Controlling Nutritional status (COUNT) score, serum albumin, Basal Energy Expenditure (BEE), and low body weight), physical swallowing function (ambulatory ability before admission, Food Intake Leves Scale (FILS), admission origin, bedridden status, Penetration-Aspiration (P-A) scale, presence of residual pharyngeal material, and Basal Index (BI)), pneumonia severity (A-DROP score, a classification tool incorporating age, dehydration, oxygen demand, impaired consciousness, and hypotension), and comorbidities (pneumonia, dementia, mental illness, malignancy, chronic lower respiratory tract involvement, and renal failure).

**Conclusion:** This systematic review identifies five key risk factors associated with discontinuation of oral intake upon discharge in patients hospitalized for aspiration pneumonia, offering valuable evidence for future clinical practice.

**Keywords:** Aspiration Pneumonia, patient hospitalized, discontinuation of oral intake, ICHUSHI, systematic review, Japan

## *List of abbreviations*

ADL	Activities of daily living
AMC	Arm muscle circumference
BEE	Basal Energy Expenditure
BI	Barthel Index
BMI	Body Mass Index
BP	Blood pressure
BUN	Blood urea nitrogen
COUNT	Controlling Nutritional status
FILS	Food Intake Leves LEVEL Scale
Fujishima Gr	Fujishima grade
MNA-SF	Mini nutritional assessment short form
NH-CAP	Nursing and healthcare-associated pneumonia
P-A scale	Penetration-Aspiration scale
TSF	Triceps skinfold thickness

VF findings

Ventricular fibrillation