

Nutritional Status and Related Factors Among Head and Neck Cancer Survivors in Taiwan

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INTRODUCTION

- Head and neck cancer (HNC) is the 7th most prevalent cancer globally, with significant incidence disparities linked to regional risk factors like tobacco, alcohol, and HPV. Taiwan, experiences a high prevalence, ranking as the 6th most common cancer among males, largely due to specific sociocultural and environmental influences. The standard treatments for HNC—surgery, radiation, and chemotherapy—often adversely affect survivors' nutritional status by impairing oral and pharyngeal functions. Complications such as dysphagia and xerostomia frequently lead to malnutrition, affecting up to 60% of patients at diagnosis, with risks persisting post-treatment.
- This study aimed to
 - Examine the nutritional status of HNC survivors who have completed treatments
 - Identify selected symptoms, depression, and essential background factors of their relationship with nutrition status in HNC survivors.

METHODS

- A cross-sectional study recruited HNC survivors from a medical center in Northern Taiwan who had completed treatment within 10 years.
- A series of questionnaires, which includes the Mini Nutritional Assessment (MNA), Symptom Severity Scale (SSS), Hospital Anxiety and Depression Scale (HADS)-depression subscale, and Background Information Form, were applied to assess these patients.
- Descriptive statistics and Spearman's correlation were used to analyze the nutrition status and related factors.

RESULTS

Table 1.

MNA Score of 108 HNC Survivors in Taiwan

Score	n (%)	Mean (SD)
Malnutrition (<=17)	9 (8.3)	-
Risk for Malnutrition (17.5-23)	35 (32.4)	-
Normal (>=23.5)	64 (59.3)	-
Total	108 (100.0)	22.792 (2.982)

Table 2.

Correlations Among MNA Score and Related Factors Among 108 HNC Survivors in Taiwan

Related factors	r-value
Pain	-.354**
Nausea	-.305**
Vomiting	-.321**
Anorexia	-.485**
Difficulty swallowing	-.541**
Fatigue	-.368**
Sore throat	-.342**
Dysgeusia	-.326**
Early satiety	-.421**
Mucositis	-.384**
Depression	-.390**

**indicates that $p < 0.01$.

CONCLUSION

- The strong correlations identified between specific symptoms, such as difficulty swallowing, loss of appetite, and malnutrition, highlight the necessity of incorporating symptom management strategies into nutritional care plans.
- Moreover, the association between depression and poor nutritional status emphasizes the importance of integrating psychological support within a multidisciplinary approach to address the physical and emotional dimensions of dietary challenges. Notably, routine nutritional assessments and personalized dietary interventions should be integrated into the standard care protocol for all HNC survivors, regardless of gender, cancer type, or stage.
- This research establishes the groundwork for the creation of individualized and all-encompassing nutritional support systems by comprehensively analyzing the correlation among various related factors of nutritional status.
- Such interventions have the potential to enhance recovery, immune function, and overall quality of life for HNC survivors in Taiwan, ultimately improving long-term outcomes and holistic well-being.

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