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An Investigation of Nutrition Risk among Hospitalised Older Adults Admitted to the Assessment, Treatment and Rehabilitation Wards of Waitemata District Health Board Hospitals

A Thesis Presented in Partial Fulfilment of the

Requirements for the Degree of

Master of Science in Nutrition and Dietetics

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Darshan Arvind Patel

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Abstract

Background: The proportion of older adults in New Zealand is increasing. Studies shows compromised nutrition status is prevalent in older adults, and can exacerbate poor health. It is therefore important to identify those who are malnourished, or those who are at nutrition risk for early nutrition intervention. Nutrition screening tools allow for the identification of nutrition risk status and initiation of nutritional care to result in improved health outcomes. Current data on the prevalence of nutrition risk in hospitalised older adults in New Zealand is limited.

Design: Cross-sectional, observational study as part of a multicentre prospective study.

Aim: To investigate the prevalence of nutrition risk among older adults (65-84 years) in the Assessment, Treatment and Rehabilitation (AT&R) wards of North Shore and Waitakere Hospitals. Potential nutrition risk factors including dysphagia risk, muscle mass and hand grip strength will also be investigated, as well as other relevant physiological and socio-demographic risk factors.

Methods: Participants were recruited within five days of admission to the AT&R wards. Face-to-face interviews and assessments were conducted on the wards. A questionnaire incorporating participant characteristics, health and support data and validated screening and assessment tools were used. Nutrition risk status was assessed by the Mini Nutrition Assessment-Short Form, dysphagia risk status was assessed by the Eating Assessment Tool, cognitive status was assessed by the Montreal Cognitive Assessment and muscle mass was assessed by bioelectrical impedance analysis. Hand grip strength was measured using a hydraulic dynamometer.

Results: A total of 89 participants took part in the study. Nutrition risk and malnutrition was evident in 43.8 and 27.0 percent of the study participants respectively. Indicated by the Mini-Nutrition Assessment-Short Form, participants with poor nutritional status were more likely to report reduced food intake, unintentional weight loss, requiring aid with activities of daily living, having previous dietetic input and being at risk of dysphagia compared to participants with ‘normal’ nutritional status.

Conclusion: A high percentage of hospitalised older adults recently admitted to the AT&R wards had compromised nutritional status. Routine screening is highly advised to identify nutritional risk and instigate nutritional care.

Keywords: Older Adults, Nutrition Status, MNA-SF, Dysphagia, Muscle Mass, Muscle Strength, AT&R ward

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Abbreviations

Abbreviation	Definition
ADL	Activities of Daily Living
AT&R	Assessment, Treatment and Rehabilitation
BIA	Bioelectrical Impedance Analysis
BMI	Body Mass Index
DHB	District Health Board
EAT-10	Eating Assessment Tool
IADL	Instrumental Activities of Daily Living
IHD	Ischaemic Heart Disease
Kg	Kilogram
MCI	Mild Cognitive Impairment
MNA	Mini Nutritional Assessment
MNA-SF	Mini Nutrition Assessment – Short Form
MoCA	Montreal Cognitive Assessment
MoH	Ministry of Health
MoW	Meals on Wheels
NZ	New Zealand
WDHB	Waitemata District Health Board
WHO	World Health Organisation