



VALIDITY OF OUTCOMES IN HOSPITALIZED OLDER ADULTS: A CROSS-SECTIONAL ANALYSIS OF GERIATRIC CARE MODELS

S. HUANG 1, H. LIN 2 and Y. LIU 3

Shin Kong Memorial Wu Ho-Su Hospital, Taipei, Taiwan

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INTRODUCTION

The increasing aging population in our country has led to a rise in the number of elderly patients undergoing orthopedic surgery annually, primarily due to prevalent issues like joint degeneration, spinal disorders, osteoporosis, and fragility fractures. Clinical observations have consistently shown that elderly inpatients undergoing orthopedic procedures in acute care settings often encounter physical functional impairments or even develop frailty after the completion of acute medical treatment. This reliance on others for daily activities significantly impacts their lifestyle and overall quality of life (Gjorgjievski & Ristevski, 2020). Numerous studies have demonstrated a strong correlation between postoperative physical functional decline in elderly patients and increased mortality, complications, longer hospital stays, in-hospital falls, pressure ulcers, mortality rates, and institutionalization rates (Shinall et al., 2020). Nevertheless, scholars argue that the implementation of routine frailty assessment and identification of associated risk factors can greatly assist clinical healthcare professionals in early detection of physical functional decline in patients. This, in turn, enables the provision of timely and effective care, which plays a critical role in the prognosis and reduction of complications in elderly orthopedic patients (Wang et al., 2022).

AIM

This project aims to increase nurses' awareness of assessing physical functional decline in elderly patients, improve the implementation rate of screening assessments, and enhance the accuracy of auditing high-risk frailty. The target goals are as follows:

Increase orthopedic nurses' awareness from 53.5% to 81.0%.

Achieve a 100% execution rate for the physical functional decline assessment tool.

Improve the accuracy of auditing high-risk frailty from 56.9% to 90.0%.

These objectives are based on relevant literature on frailty assessment interventions (Leblanc, A., 2022) and benchmark data from a similar-level medical center (Xie et al., 2021).

METHOD

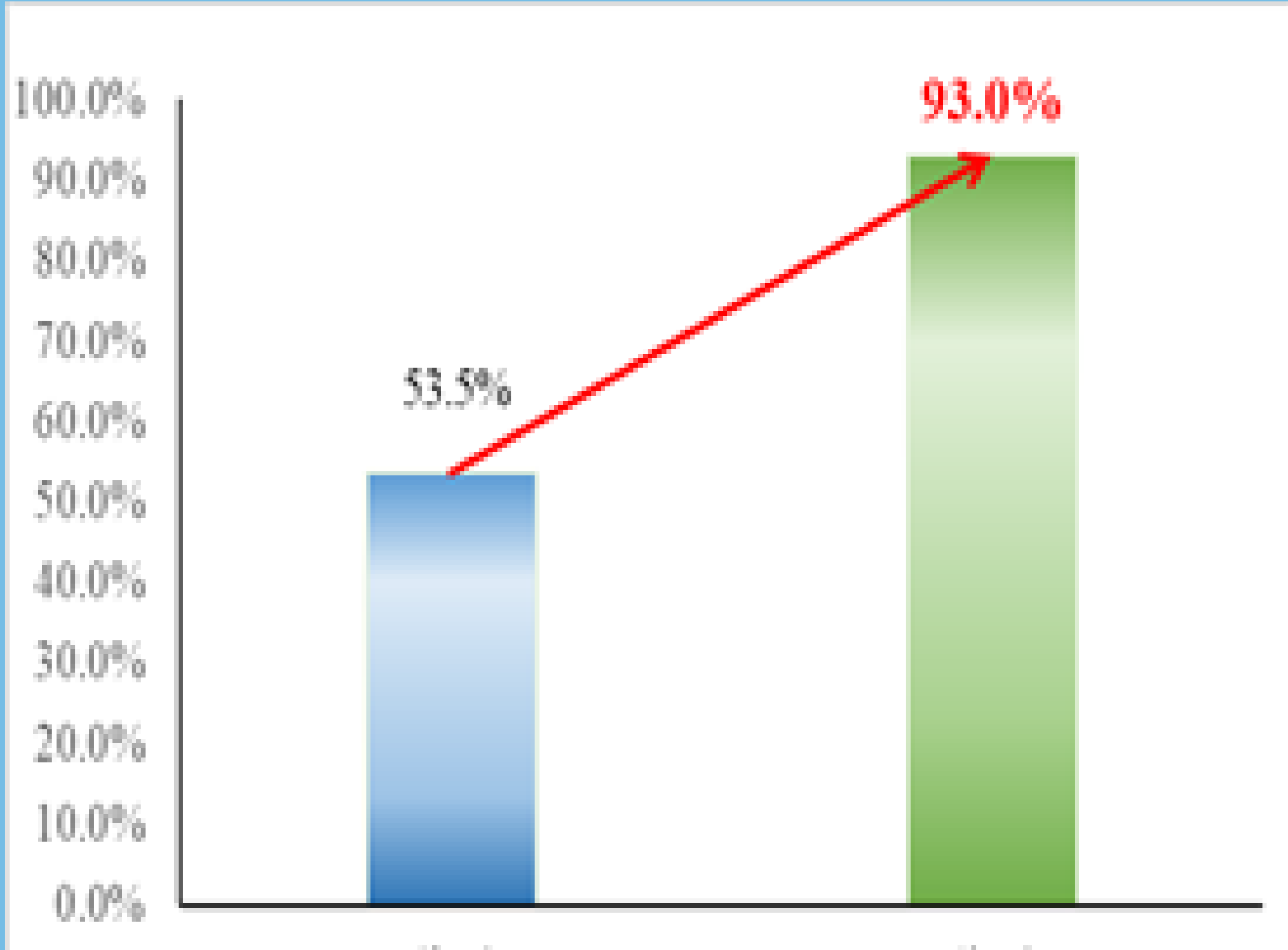
Strategies to improve nurses' ability to assess frailty in advanced age include:

- ◆ Educational strategy intervention to improve nurses' lack of frailty awareness
- ◆ Construct frailty screening and evaluation tools
- ◆ Incorporate frailty assessment into normalization
- ◆ Build frailty high-risk audit mechanism

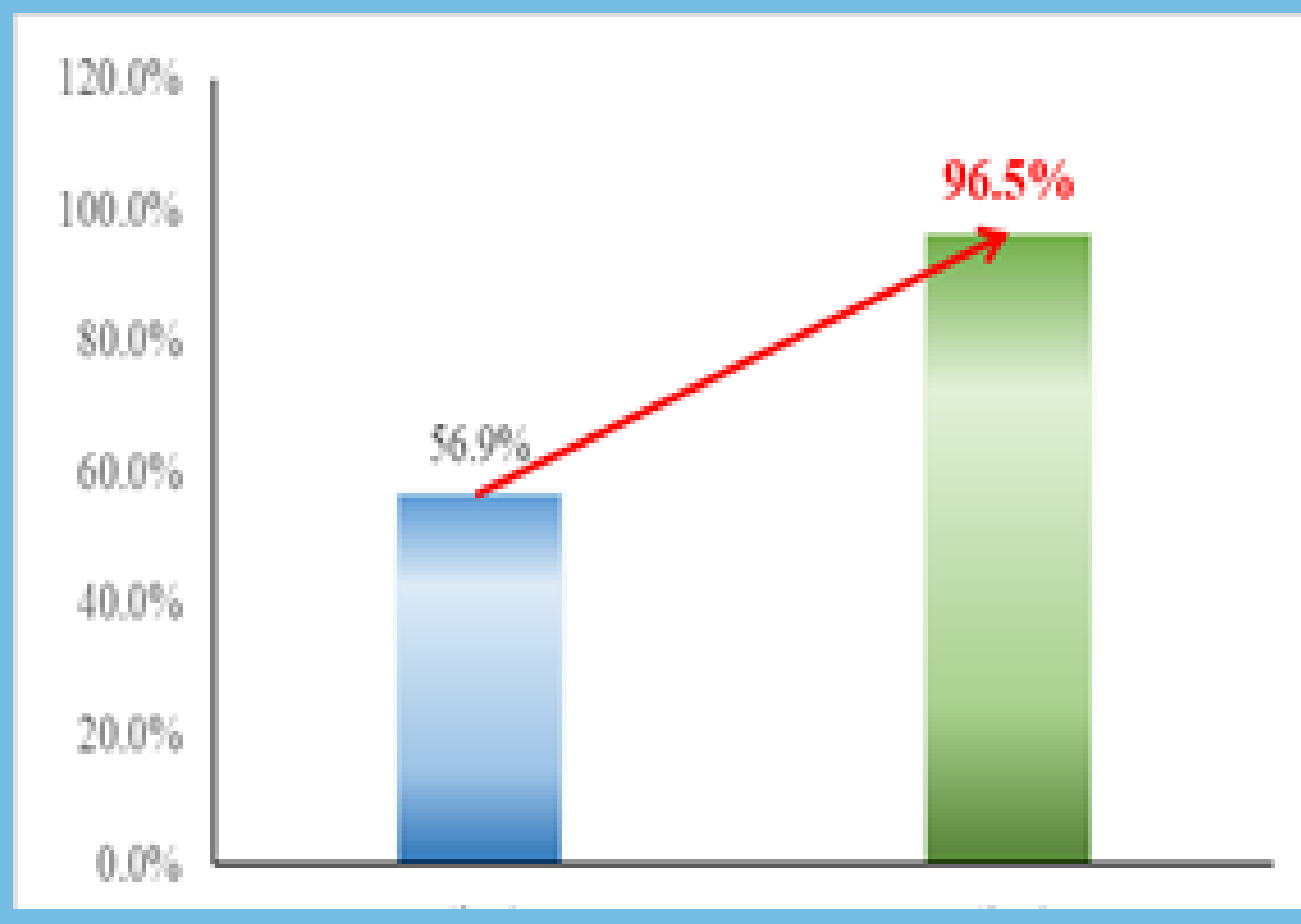
RESULTS

Variable Name	Ongoing Improvement (2021/4-09)		Improvement & Sustained Effect (2021/10-2023/1)	
	Before Discharge	After Discharge	Before Discharge	After Discharge
Elderly Inpatients	N=199		N=388	
Level 3	21(10.5%)	11(0.6%)	92(25%)	79(21.4%)
Level 4	12(0.6%)	16(0.8%)	100(27.1%)	93(25.2%)
Level 5	28(14%)	26(13%)	78(21.1%)	80(21.7%)
Level 6	43(21.6%)	44(22%)	64(14.4%)	63(17.1%)
Level 7	95(48%)	95(48%)	54(14.6%)	53(14.4%)
Rehabilitation Potential	7% increase		20% increase	
Discharge Referral Rate	100%		100%	
PAC Referral Rate	100%		100%	

Unit Rehabilitation Potential Ratio and Discharge Readiness Rate (with additional benefits)



Comparison of Nurses' Awareness of Age-related Physical Functional Decline Before and After Improvement



Comparison of Accuracy in High-Risk Frailty Audit Before and After Improvement

CONCLUSIONS

After conducting in-depth analysis of abnormal falling events, reviewing medical records, and examining supporting literature, it has been confirmed that frailty exists on a continuum between health and disability. Therefore, it is crucial to enhance nurses' assessment capabilities in identifying physical frailty. This can be achieved through various promotional channels, such as organizing awareness programs and providing in-service education on frailty assessment. Additionally, training on assessment tools specific to physical frailty should be conducted within the unit. Furthermore, it is essential to assist in planning an assessment monitoring program and developing evaluation forms for frailty among elderly patients in the hospital. Establishing a high-risk auditing mechanism is also a crucial step. Comprehensive assessments centered around the patients should be conducted, and rehabilitation care plans should be developed. The integration of long-term care services and post-acute care (PAC) programs should be facilitated to ensure that frail elderly patients with rehabilitation potential continue to receive necessary care services even after being discharged back to the community.

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CONTACT INFORMATION



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