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EFFECT OF SINGAPORE HOUSING INDEX AND MEDICAL SUBSIDY ON CONCORDANCE WITH HOME DEATH PREFERENCE: COHORT STUDY OF CANCER PATIENTS ON HOME HOSPICE CARE

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Introduction

Up to 77% of Singaporeans prefer to die at home¹; helping them achieve this goal is an important quality indicator for home-based palliative care (HPC). We hypothesise that socioeconomic inequities may prevent patients from fulfilling home death despite their preferences.

Aim

To analyse the impact of an individual's socio-economic status (SES) on the concordance with home death preference.

Methods

Study Design

- Retrospective cohort study of 660 patients.

Eligibility Criteria

- Cancer patients enrolled under HCA Hospice from 2018 to 2020.
- Patients with the home as their preferred place of death.

SES Measures

- We selected the following as surrogates of SES:
 - Singapore Housing Index (SHI), which is a validated Singapore-contextualised building-level, asset-based SES measure². It classifies each building by the weighted average number of rooms of each unit, with larger values indicating higher SES.
 - Government healthcare subsidy tiers (based on per capita household income)³.

Data Analysis

- Logistic regression was performed to examine the associations between SHI and government medical subsidies against concordance with home death preference.
- Adjusted for the age at first enrolment to HPC, gender, ethnicity, religion, cancer subtypes, and home living arrangements.

Results

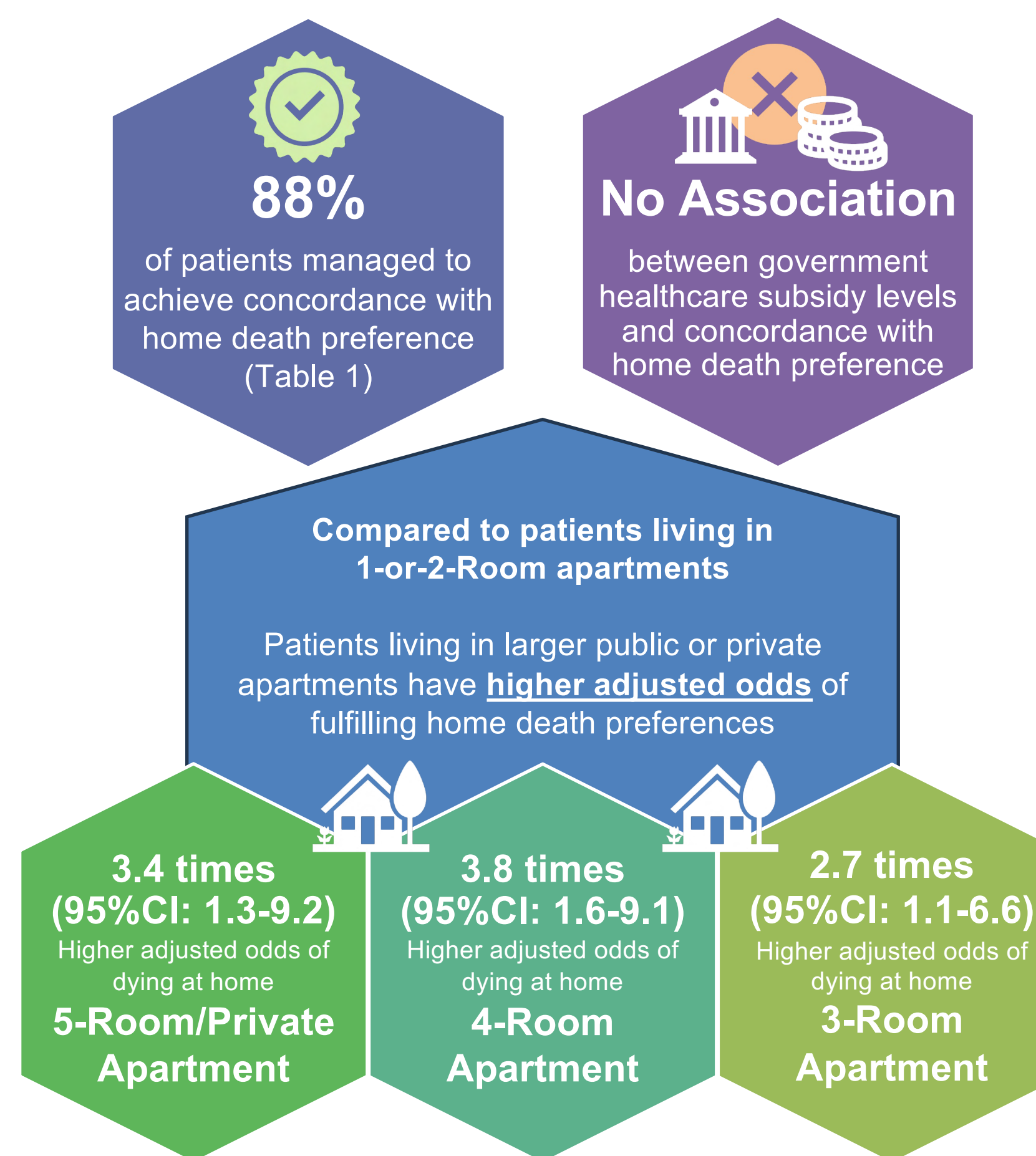


Table 1: Participant Characteristics (N=660)

Patients with Home Death Preferences Honoured, n (%)	581 (88.0)	Religion	
Patients with Home Death Preferences Not Honoured, n (%)	79 (12.0)	Non-Religious, n (%)	32 (4.9)
		Religious, n (%)	628 (95.1)
Gender		Cancer Type	
Female, n (%)	365 (55.3)	Gastrointestinal, n (%)	297 (45.0)
Male, n (%)	295 (44.7)	Lung, n (%)	106 (16.0)
		Breast/Gynaecological, n (%)	110 (16.7)
Housing Index		Others*, n (%)	147 (22.3)
1-or-2-Room Apartment, n (%)	41 (6.2)		
3-Room Apartment, n (%)	188 (28.5)	Living Arrangements at Home	
4-Room Apartment, n (%)	277 (42.0)	Not Living Alone, n (%)	652 (98.8)
5-Room/Executive/Private Apartment, n (%)	154 (23.3)	Living Alone, n (%)	8 (1.2)
Age at First Enrolment to HCA Hospice, mean (SD) years	72.4 (12.5)	Government Healthcare Subsidy Tier	
		51-80%, n (%)	412 (62.4)
Ethnicity		26-50%, n (%)	96 (14.5)
Chinese, n (%)	532 (80.6)	1-25%, n (%)	7 (1.1)
Malay, n (%)	63 (9.6)	0%, n (%)	145 (22.0)
Indian, n (%)	31 (4.7)		
Eurasian/Others, n (%)	34 (5.1)		

* Malignancy of the urinary tract, skin, soft tissue, bone, eye, brain, endocrine glands, oral cavity, lymphoid/haematopoietic tissue, or other unspecified sites were classified under others.
SD: Standard deviation

Conclusion

- SES inequality hinders the fulfilment of home death preferences and low-SHI patients are associated with a lower likelihood of home death preferences which remains significant despite adjusting for government healthcare subsidies and demographics. More is needed to understand the barriers involved in overcoming SES inequality.
- A high proportion of patients on home-based palliative care are able to achieve concordance with their preferences for home death.

References

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