

Does Advance Care Planning Affect Prognosis of Nursing Home Residents after enrolling into a Palliative Care Programme?

Zhou Y¹, Chung S^{2,3}, Lim YJ², Tan L^{2,3,4}, Sim LK², Magpantay GC², Muthusamy T², Yu CH², Tan QW², Lee P², Sheikh Abd Rahman SZ², Chua A² & Low JA^{2,3,4}

¹ Department of Internal Medicine, Singapore General Hospital, ² GeriCare, Yishun Health,

³ Department of Geriatric Medicine and Palliative Medicine, Khoo Teck Puat Hospital, ⁴ Geriatric Education and Research Institute

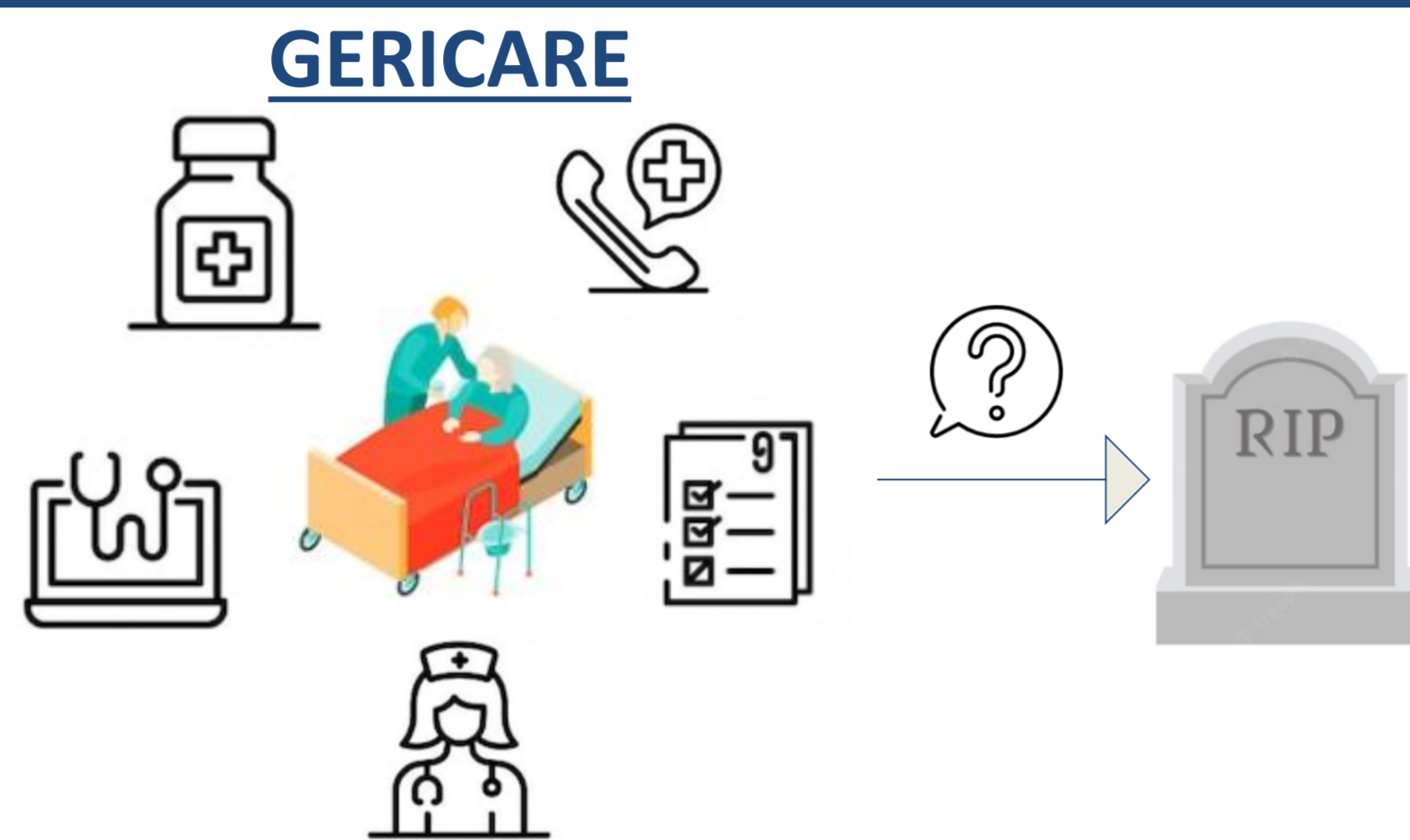
Background

Advance Care Planning (ACP) is a process that can assist individuals, including those with life-limiting illnesses, receive individualised care and die in a place of preference.¹ Although the aims of ACP to uphold patient's preferences are largely deemed to be beneficial,² little is known if ACP completion affects prognosis of Nursing Home (NH) palliative residents. GeriCare is a community palliative care programme that supports NH residents with palliative care needs and aims to empower NH nurses to care for palliative residents. ACP is introduced to residents shortly after enrolment into GeriCare, which enables residents to state their preferences regarding end-of-life (EOL) care, preferred place of care (PPOC) and preferred place of death (PPOD) through ACP, especially in the last year of life.

Objective

Aim:

To evaluate if ACP completion affects the prognosis of residents who have been enrolled in the GeriCare palliative care programme, which may influence residents' involvement/participation in ACP in the future.



Methodology

July 2019 to May 2022

Retrospective Cohort Study

294 Deaths

724 Nursing Home Residents



8 Nursing Homes

469 ACPs Completed

Recorded the average Enrolment Till Death (ETD) Days



Recorded the average Enrolment Till Death (ETD) Days

- A cohort of 724 residents were enrolled and data from July 2019 to May 2022 were analysed.
- A comparison was made of the characteristics of deceased residents who had ACPs completed, their preferences and the length (days) of Enrolment till Death (ETD).

Results

1. Demographics

- The average age of the cohort was 81.8 years old
- There were 319 males and 405 females enrolled into the study (Fig 1A.)
- Frailty and advanced neurological disease comprised of the greatest proportions of the residents enrolled (Fig 1B.)

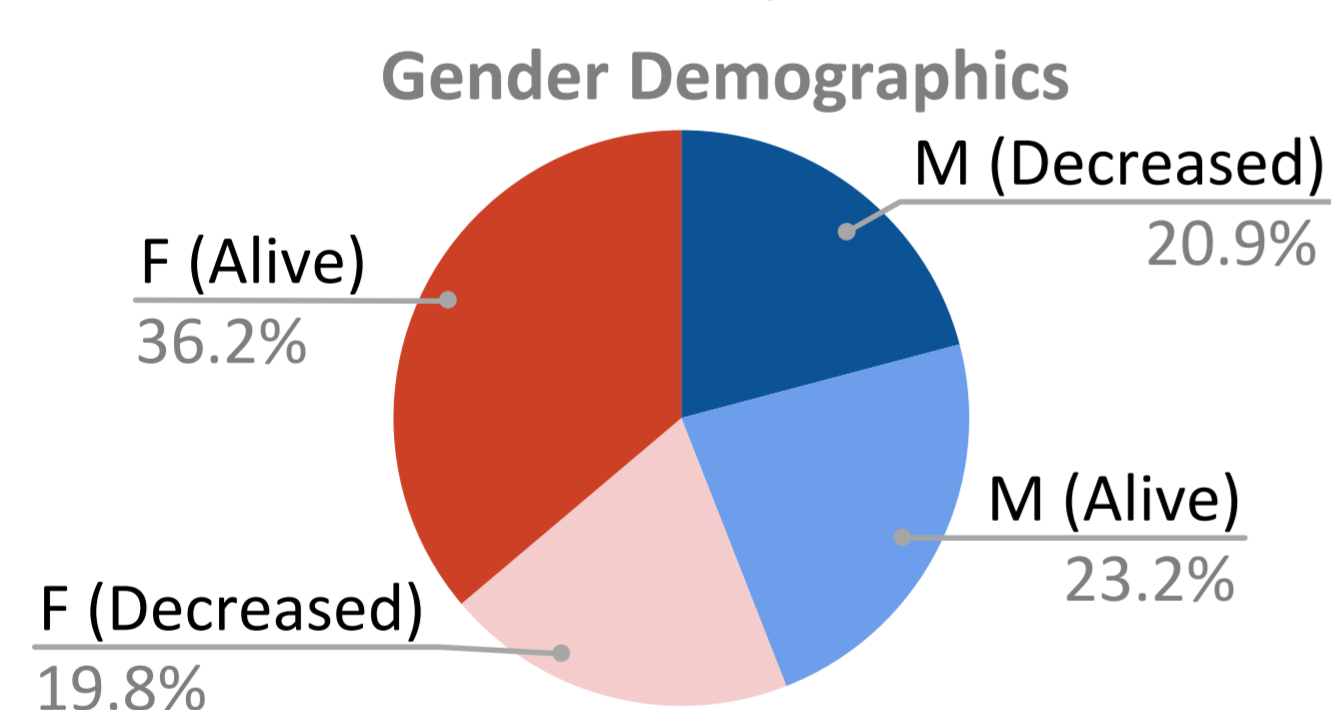


Fig 1A. Gender demographics and mortality rates

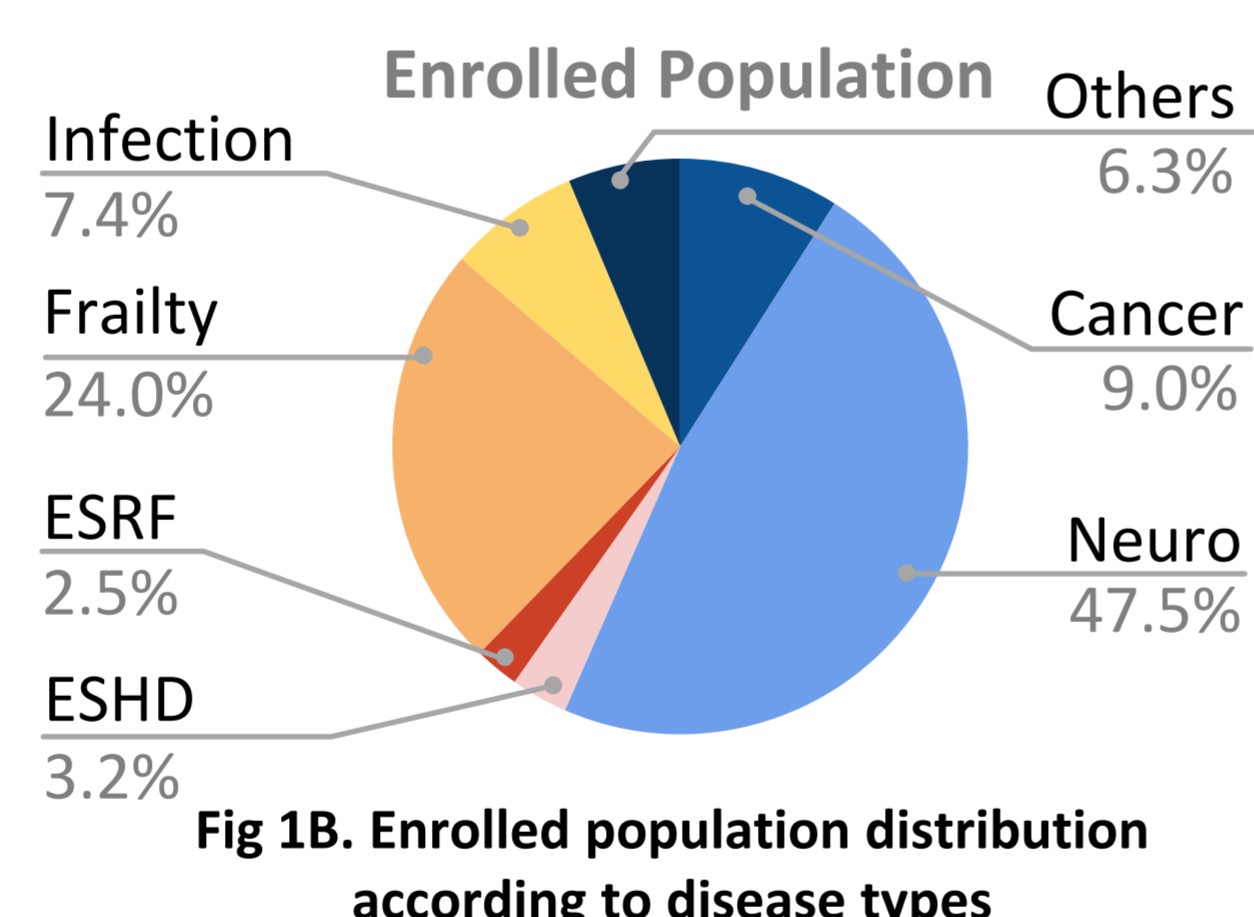


Fig 1B. Enrolled population distribution according to disease types

2. ACP completion rates

- 64% of the cohort completed an ACP (Fig 2A.)
- 239 residents (81%) of the deceased residents completed an ACP. Among those who completed an ACP, most of them chose Comfort Care Measures > Limited Intervention > Full Treatment (Fig 2B.)
- The proportion of completed ACPs among the deceased was higher than among those who were alive, which suggested that ACP could affect prognosis (Fig 2C.)
- The lowest percentage of completion of ACP among diseases were cancer patients at 68% (Fig 2D.)

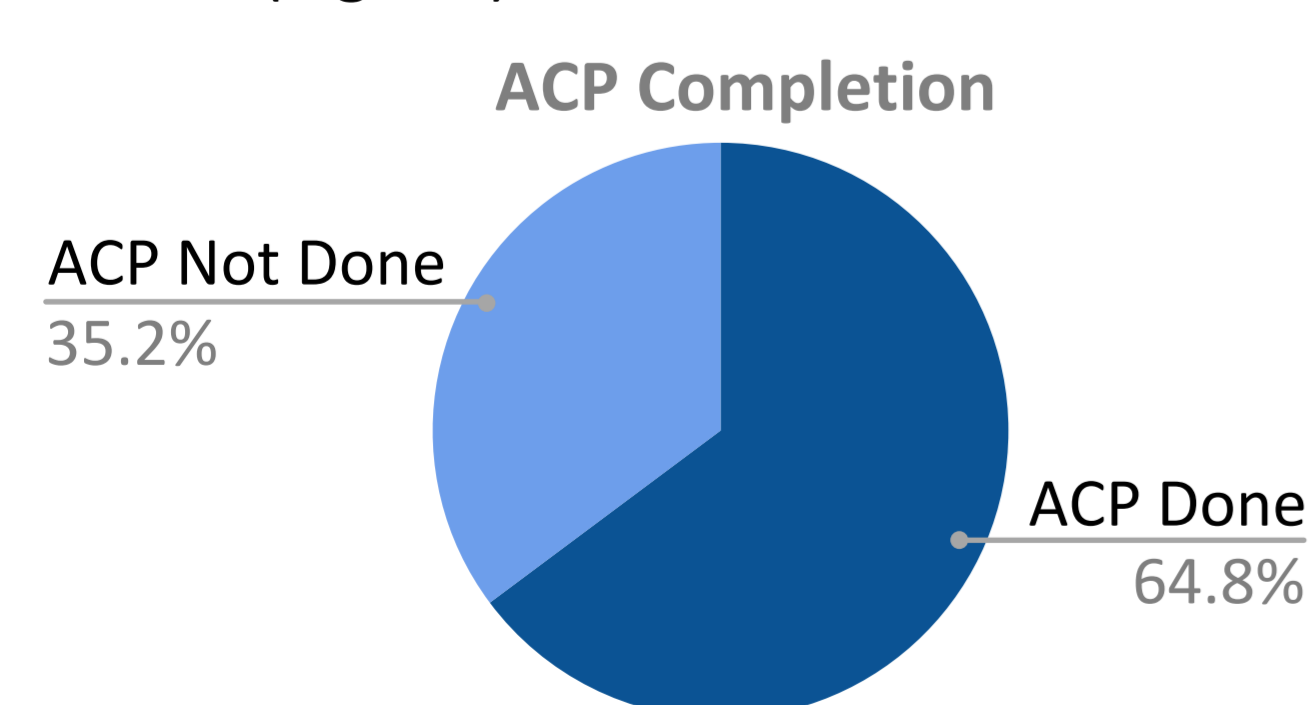


Fig 2A. Percentage of ACP completion and indicated preferences

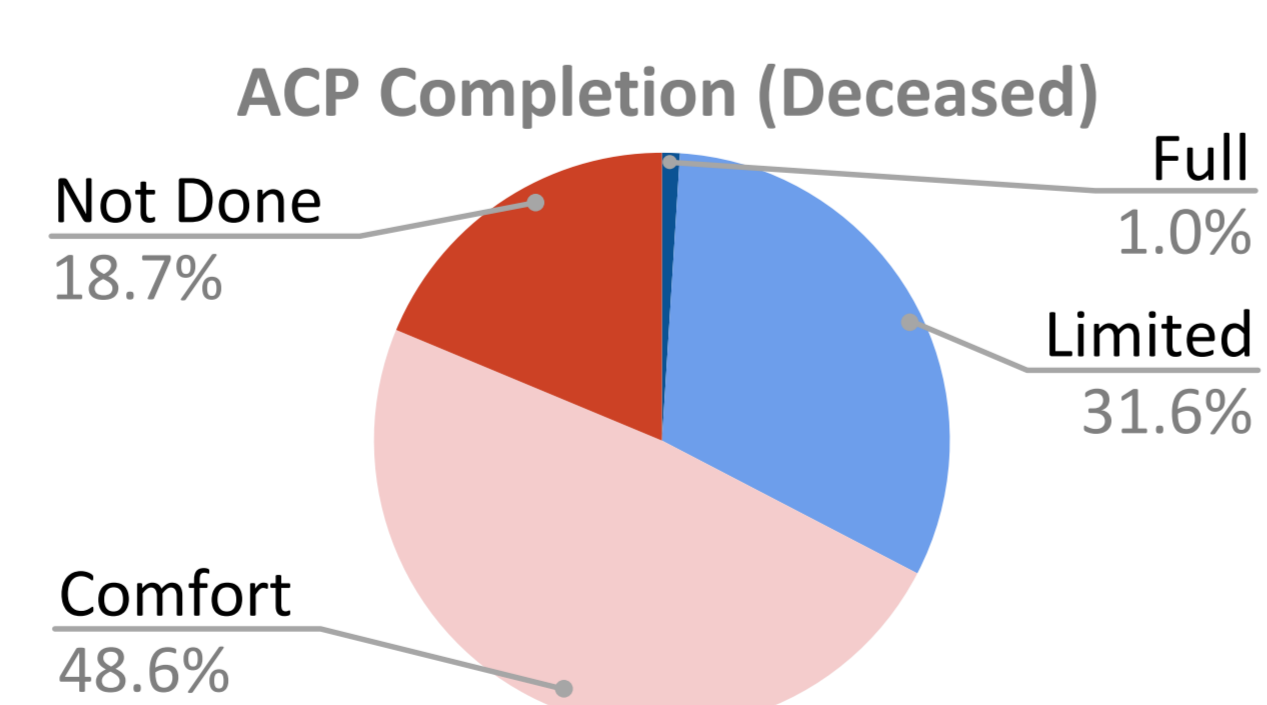


Fig 2B. ACP completion among the deceased cohort

ACP Completion and Corresponding Death Occurrences

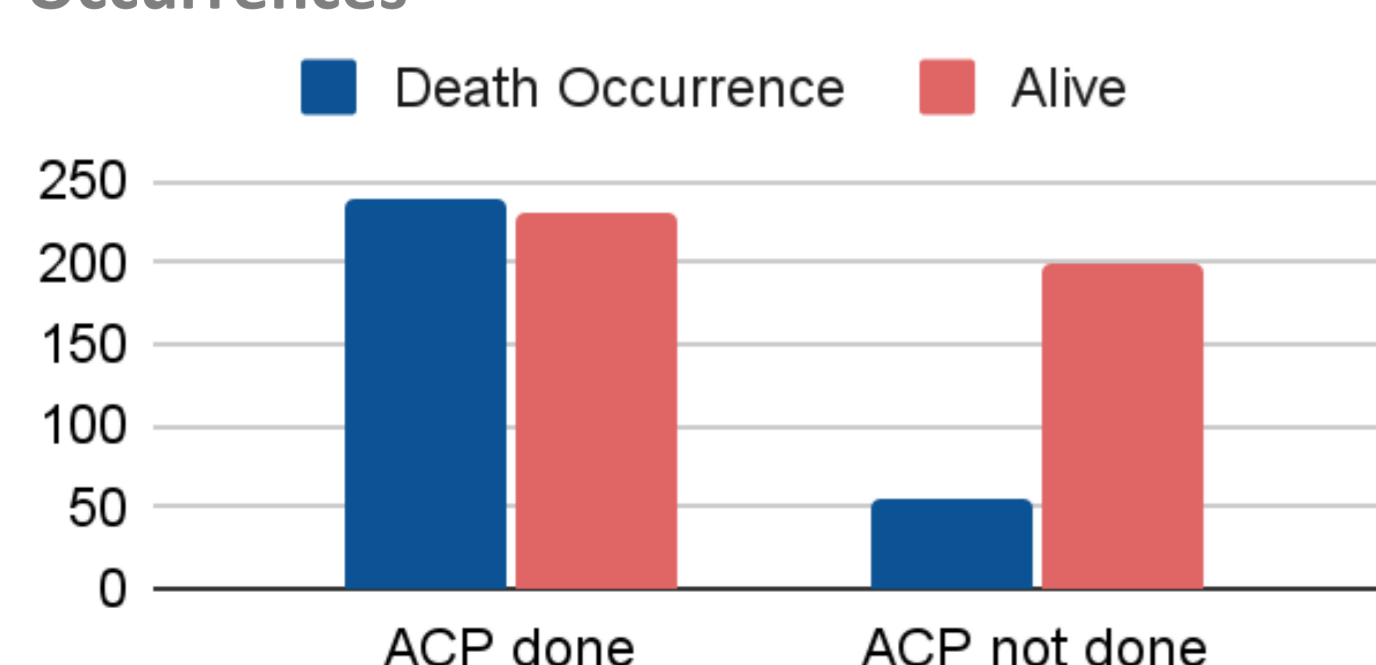


Fig 2C. Rate of death occurrence associated with ACP completion

Percentage of ACP Completion according to disease types

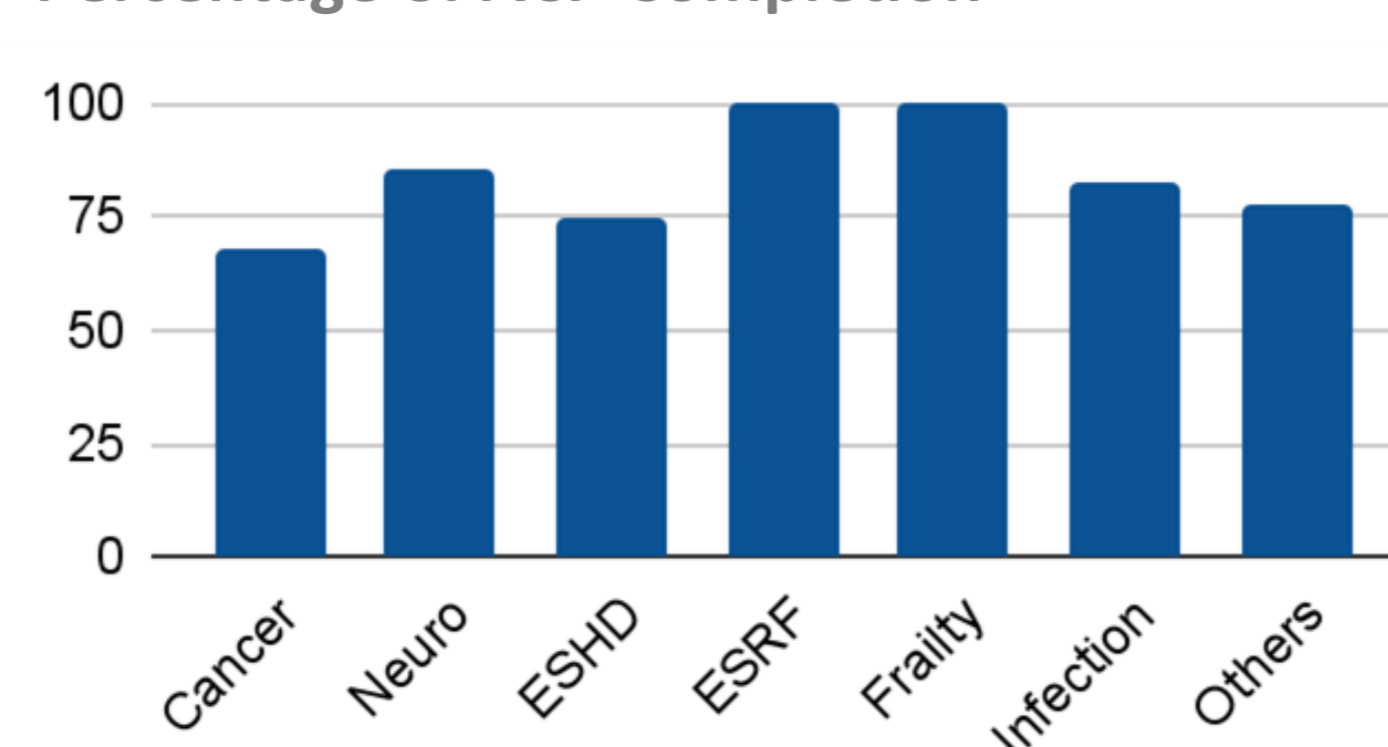


Fig 2D. Percentage of ACP completion according to disease types

Results (Continued)

3. ACP completion compared to ETD (length in days)

- The average ETD among all deceased residents was 184 days, with a median of 111 days.
- The average ETD among those who have done ACP was longer than those without among the deceased population. Those who requested for full active treatment had the shortest ETD average, compared to those who chose comfort care and limited trial of intervention. On the contrary, the ETD was the longest in the group who chose limited trial of treatment. (Fig 3.)

ACP Preferences VS ETD (Days)

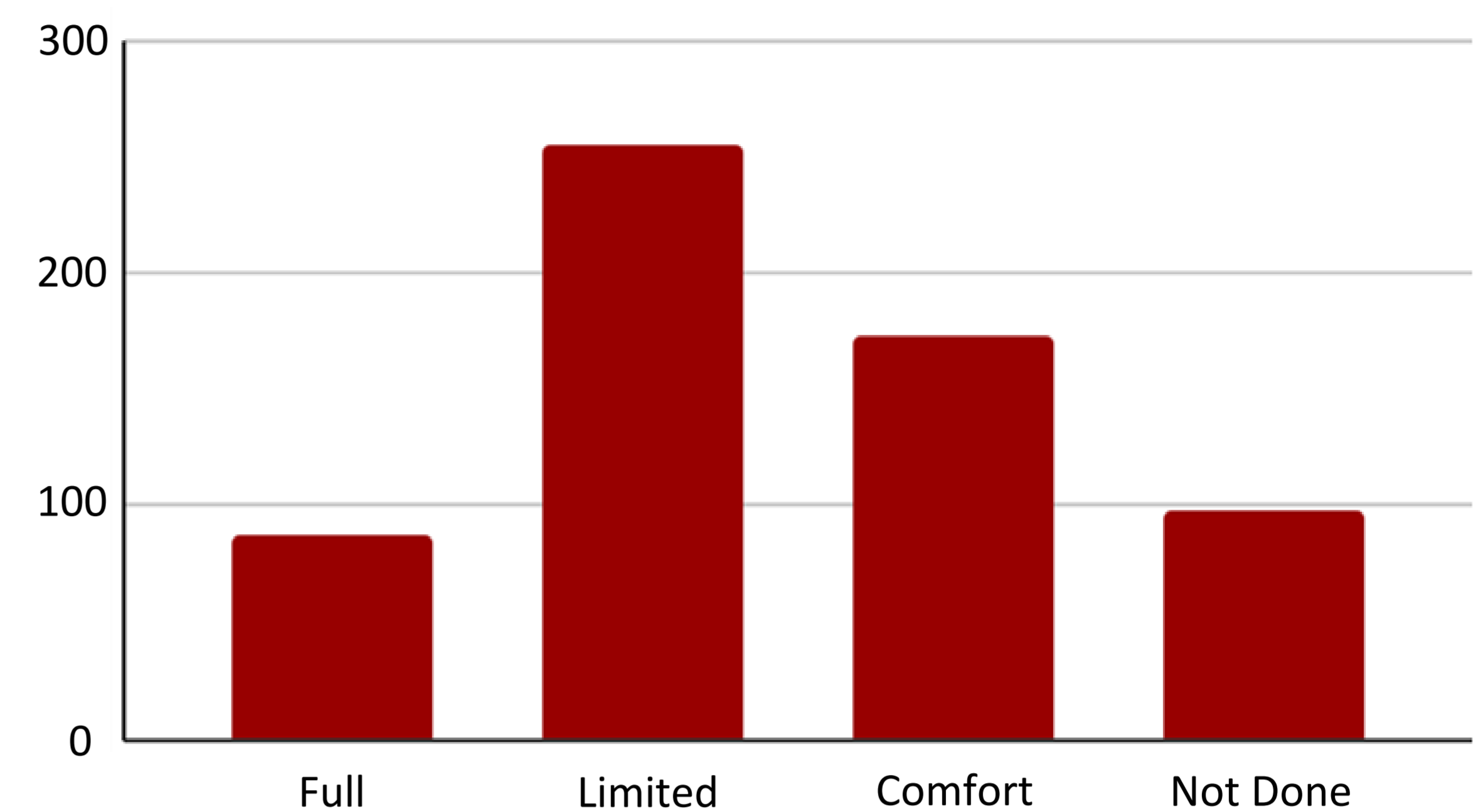


Fig 3. Enrolment Till Death (Days) with associated ACP preferences if done

4. PPOC and PPOD statistics

- Among those who were deceased and had ACPs completed, 95% of the PPOC and 86% of PPOD were fulfilled (Fig 4A. and Fig 4B.)

PPOC Honoured

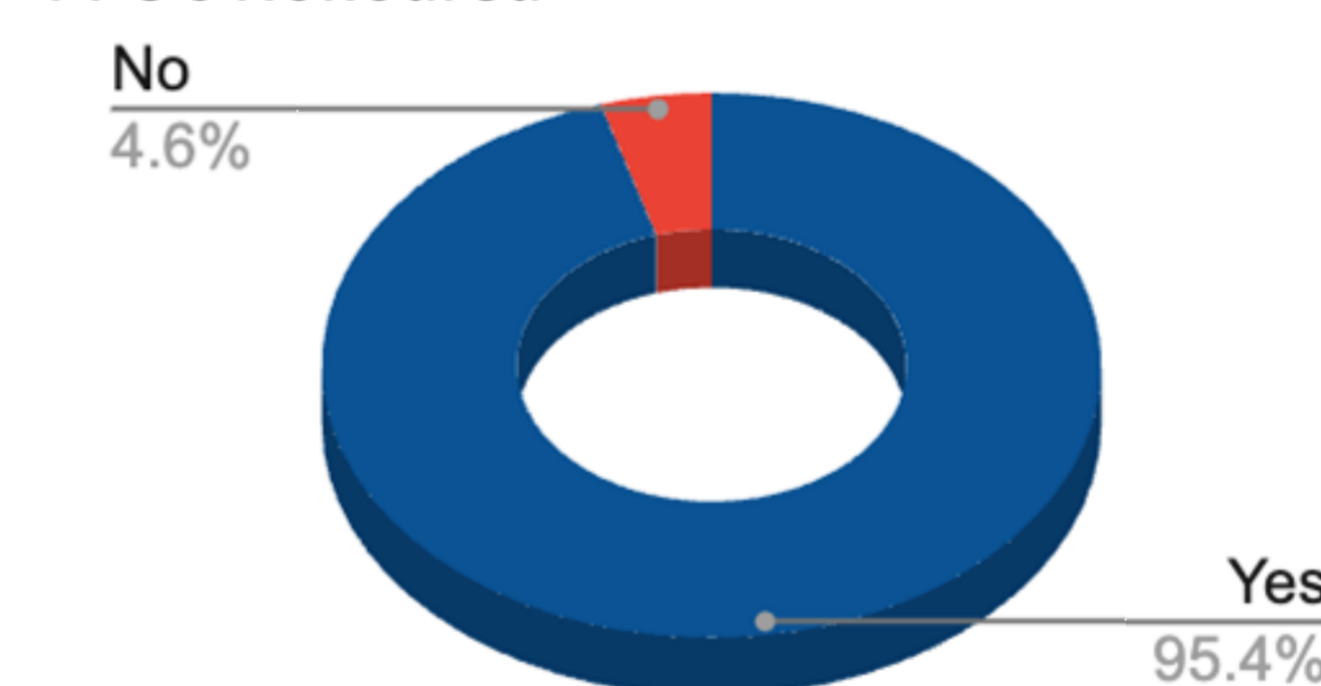


Fig 4A. Percentage of PPOC honoured

PPOD Honoured

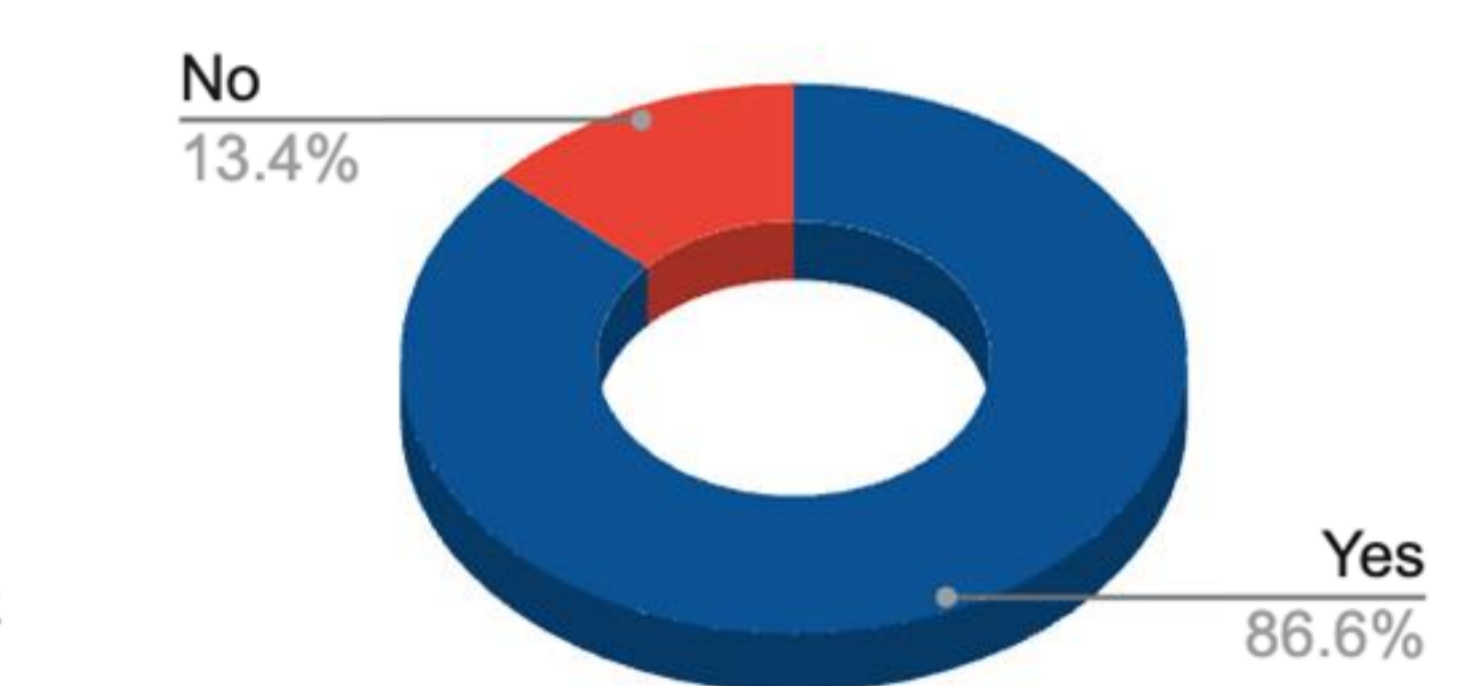


Fig 4B. Percentage of PPOD honoured

Discussion

Discussion 1: Reasons for 'higher death occurrences' in ACP group

- ACPs were often proposed and prioritised in patient groups which had an expected survival of less than 1 year. These are often patient groups with established conditions which could inform disease trajectory, complications and prognosis with proposed health decisions.²
- There were also studies which indicated the older population and populations with life-limiting illness were more inclined to do ACP³ - which corresponded to the higher number of ACPs being completed in the deceased group, as the presence of frailty or a life-limiting illness might prepare for possible EOL.
- The higher rate of death occurrences among those with ACP completion, could be explained by the urgency of ACPs to be done with NH residents who had shorter prognosis, rather than ACPs having direct effect on shortening prognosis.
- It could be postulated that NH residents who have selected comfort measures to have had lesser life prolonging treatment and possibly a shorter prognosis, however, this was in line with their preferences.

Discussion 2: ACP does not worsen prognosis

- This was illustrated by the finding that the ETDs were longer in the NH residents with ACP completed compared to those who have not completed ACP, suggesting that ACP completion did not shorten prognosis.
- It was also shown that ETD was shortest in the full active treatment group, compared with the limited intervention and comfort care measure groups.

Discussion 3: Aims of ACP

- ACP is about honouring preferences rather than withdrawing treatment.
- The percentages of PPOC and PPOD met within the deceased cohort illustrated the utility of ACP in helping to meet EOL preference.

Limitations

- This was a retrospective study with limited parameters available.
- There were also no prognostic indicators in the parameters.
- The study was only conducted on 1 palliative programme working with 8 NHs in Singapore which might not be generalized to all NHs countrywide.

Conclusion

ACP completions did not worsen the prognosis of NH residents who were enrolled into a Palliative Care programme. Instead, ACP is an empowering process where residents' care preferences are discussed and honoured. Importantly by meeting patients' PPOC and PPODs, this study also illustrated that the completion of ACPs could improve EOL care according to the residents' preferences.

References

- Sudore RL, Lum HD, You JJ, et al. Defining Advance Care Planning for Adults: A Consensus Definition From a Multidisciplinary Delphi Panel. *J Pain Symptom Manage* 2017; 53:821.
- Butler M, Ratner E, McCreedy E, Shippee N, Kane RL. Decision aids for advance care planning: an overview of the state of the science. *Annals of internal medicine*. 2014 Sep 16;161(6):408-18.
- Stewart F, Goddard C, Schiff R, Hall S. Advanced care planning in care homes for older people: a qualitative study of the views of care staff and families. *Age and ageing*. 2011 May 1;40(3):330-5.