Preferences for End-of-Life Care among Dialysis Patients: A Discrete Choice Experiment

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Disclosures

- Ania Filus – former employee of DaVita Clinical Research
- Katie Harmeyer – current employee of DaVita, Inc.
- Steve Brunelli – employee of DaVita Clinical Research, spouse an employee of AstraZeneca
- Francesca Tentori - employee of DaVita Clinical Research

Background and Aims

Given the high symptom and morbidity burden related to kidney failure, there is an urgent need to deliver care that aligns with patient wishes and priorities at each stage of their disease, including as they approach end of life (EoL).

Aim: Evaluate dialysis patients' preferences for aspects of EoL care including pain management, frequency of hospitalizations, and place of death

Methods

Design informed by results from Phase 1 of the project; survey pilot tested via cognitive interviewing with 14 patients.

Online discrete choice experiment assessing relative importance of 3 aspects of EoL care:

- pain control
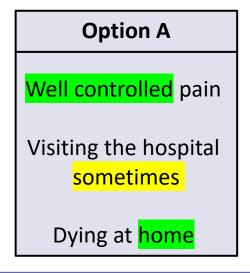- frequency of hospitalizations
- place of death
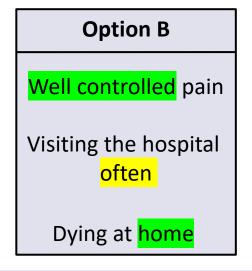
Methods

Discrete choices

Attribute	Levels
Pain control until death	• Well controlled pain (1) • Poorly controlled pain (0)
Frequency of hospitalizations until death	• Visiting the hospital sometimes (1) • Visiting the hospital often (0)
Place of death	• Dying at home (1) • Dying in the hospital (0)

Methods

- Utilized block fractional factorial design to address limited attention span

- There were 2 blocks; in each patients were presented with 4 questions

- In each question, patients were asked to choose between 2 scenarios (figure below)

Read carefully the description of two hypothetical options for care at the end of life. Which option (A or B) would you prefer? Select one choice.

Option A	Option B
Well controlled pain	Well controlled pain
Visiting the hospital sometimes	Visiting the hospital often
Dying at home	Dying at home

Patient Characteristics

796 responses collected through Aug-Sept 2021:

- in dialysis clinics facilitated by clinic staff (67% of sample)

- via online dialysis patient community (33% of sample)

	Survey sample N = 796
Female (%)	40.0
Age (%) <45 45-64 65-74 ≥ 75	24.2 51.0 13.7 11.2
Race (%) White Black Hispanic Asian	36.9 35.1 16.4 4.7
Time on dialysis (self-reported)(%) <1 year 1-2 years 3-4 years 5-7 years 8+ years	15 25 26 19 15
Rate your current health (%) Not sure Better than other patients Average Worse than other patients	12 33 49 6

Results

	Coefficient (SE)	OR
Well managed pain vs. not well managed pain	1.31 (0.05)	3.7
Dying at home vs. dying in the hospital	0.40 (0.05)	1.5
Occasional hospitalization vs. frequent hospitalization	0.29 (0.05)	1.3

$p < 0.001$ for all categories
No observed statistical interaction among the 3 aspects of EoL care

The preference for well managed pain was 3-4.5X as strong as the preference for dying at home and lower frequency of hospitalizations

Conclusions

The level of pain management was the most important attribute of quality of care at the end of life, over frequency of hospital visits and place of death.

Thank you

Appendix

Approach

	option A				option B		
	pain	**hospitalizations**	**place of death**		**pain**	**hospitalizations**	**place of death**
block 1	poorly controled	sometimes	at home		welll controlled	often	in the hospital
	well conrolled	sometimes	in the hospital		poorly controlled	often	at home
	well controlled	often	at home		poorly controlled	sometimes	in the hospital
	poorly controlled	often	in the hospital		well controlled	sometimes	at home
	pain	**hospital**	**death**		**pain**	**hospital**	**death**
block 2	poory controlled	sometimes	in the hospital		well controlled	often	at home
	well controlled	sometimes	at home		poorly controlled	often	in the hospital
	poorly controlled	often	at home		well controlled	sometimes	in the hospital
	well controlled	often	in the hospital		poorly controlled	sometimes	at home

- Option A is a block fractional factorial design (FrF2 package in R)
- Option B generated by using rule Modulo 1 : 0 => 1
                                              1 => 0