TraCE Study: Transition to Chronic Hemodialysis in End-Stage Renal Disease

Taylor Perry; Connor Harrigan; Mercedeh Kiaii, MD

Introduction

The transition to hemodialysis (HD) is a major life-altering event for patients, and it forces them to consider their important physical, emotional, social, and spiritual needs. With the increasing burden of chronic kidney disease (CKD) and end-stage renal disease (ESRD) in Canada, it is imperative for health professionals working in renal care to aid in making the transition to dialysis as smooth as possible.

The aim of this project was to identify coping strategies and resilience factors utilized by patients on chronic hemodialysis for renal replacement therapy (RRT). Recognizing and understanding these strategies will help health care professionals working in dialysis better equip future patients in adapting to the transition from CKD management to end-stage HD.

Although such studies are common in other major transitional chronic illnesses, to date there has been rather limited investigation of the patient experience in transitioning to dialysis, particularly in the Canadian context. People on dialysis must adapt to many significant life changes, including dietary restrictions, new treatment schedules, uncertainty, and an increasing dependence on family and health care providers. Exploring how patients navigate these changes and adjust to new life routines is an important reference for renal health care workers.

Study Purpose

- To identify common coping strategies and resilience factors utilized by patients on chronic hemodialysis (HD)
 - How do these strategies differ from renal care workers' common understanding and assumptions of patients on dialysis?
- To communicate these findings to renal health care workers
- Influence practice to better prepare and transition renal patients to chronic HD
- To give a voice to the patient experience!

Research Questions

Primary: What strategies do end-stage renal disease (ESRD) patients use to adjust to life on chronic hemodialysis, beyond those already identified in the literature and in other disease processes?

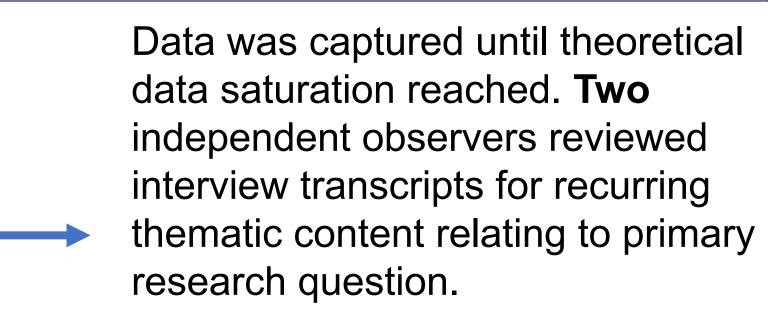
Secondary: How can health professionals working in ESRD and chronic kidney disease (CKD) assist patients with the transition to chronic hemodialysis?

Secondary: Do coping strategies change the longer an individual is on dialysis?

Secondary: Are there generalized mechanisms of resilience in transition to dialysis, or are strategies more diverse and individual-specific?

Study Design

Qualitative, cross-sectional study with 20 in-person, semistructured interviews conducted on 6D dialysis ward at St. Paul's Hospital between July 2018 and May 2019.



Study Population and Sampling

- In-person, semi-structured interview format
- Patients who met study criteria outlined above were approached
- Potential participants had to go through the study consenting process and sign informed consent prior to participation
- 20 interviews conducted from July 2018 to May 2019
- All participants must be 19 years of age or older at the time of consent
- ESRD patients on chronic hemodialysis for at least 90 days
- Patients with life expectancy less than 12 months (as determined by a nephrologist) were excluded

→ Due to lack of translation resources, this early study did not include patients who had limited ability in English

Cohort Description

- 20 study participants
- 12 male, 8 female
- Mean Age: 59.8 years
 - Range from 28-91 years
- Mean duration of current stint on HD at time of interview: 29 months
- Minimum Duration: 3 months, 8 days
- Maximum Duration: 79 months, 15 days

Example Questions

What were some of the biggest challenges you faced in transitioning to dialysis?

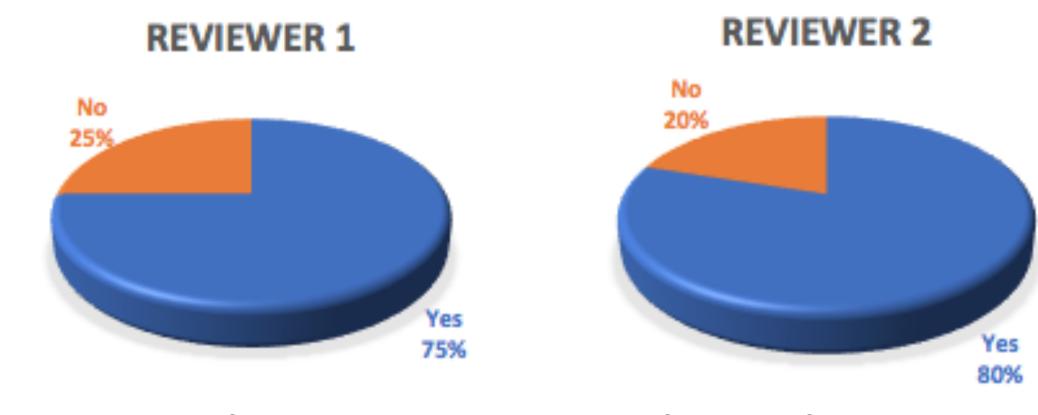
Can you identify what supports that you relied upon in making the transition to dialysis?

To what extent does the prospect of a future kidney transplant play a role in allowing you to cope with life on dialysis?

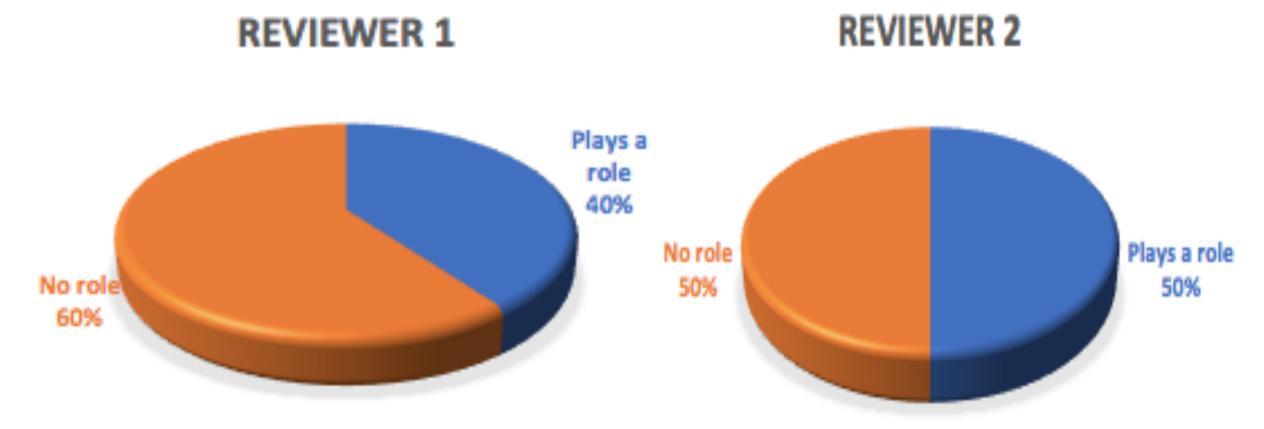
What role does spirituality play in helping you adapt to life on dialysis, if any?

Results

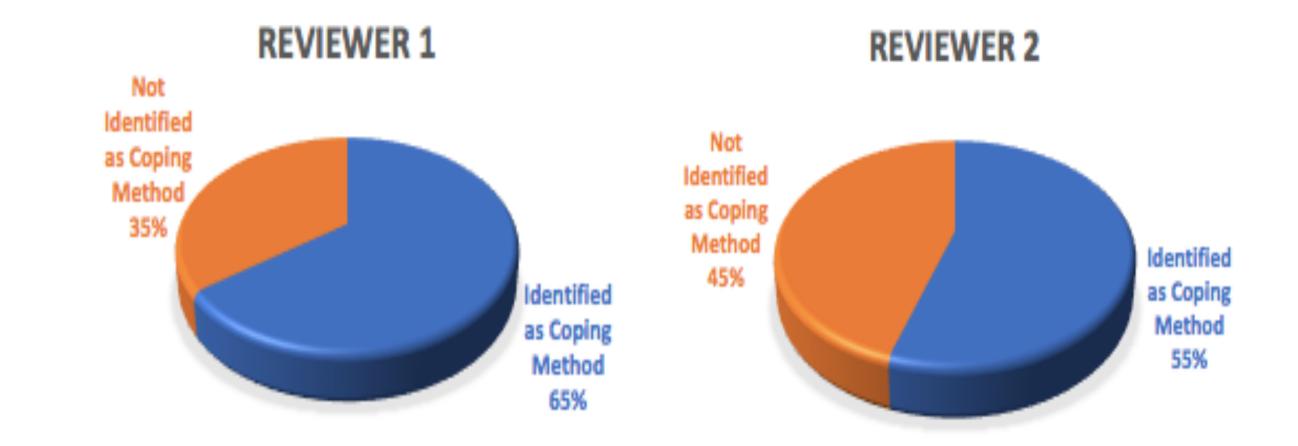
Percentage of interviewees who identified social supports (friends, family, etc.) as playing an important role in helping them cope with life on dialysis:



Percentage of interviewees who identified the future possibility of a kidney transplant as playing an important role in helping them cope with life on dialysis



Percentage of interviewees who identified learning acceptance or perspective on their situation as a method of coping with life on dialysis



Discussion

Building on previous literature, social supports were identified as the most common form of coping strategy for dialysis patients. The prospect of a future transplant only figured in roughly half of respondents' identified coping mechanisms, contrary to early expectations. These initial findings warrant further evaluation given the project's small sample and language barriers. It would be worthwhile to assess whether these findings hold for community HD populations and those for whom English is a second language.

REFERENCES

Subramanian, L., *et al.* (2017). Coping with kidney disease – qualitative findings from the Empowering Patients on Choices for Renal Replacement Therapy (EPOCH-RRT) study. BMC Nephrology 18(119). Rees J, Chilcot J, Donnellan W, Soulsby L. Exploring the nature of illness perceptions in people with end-stage kidney disease. *J Ren Care*. 2018;44(1):19-29.

Barberis N, Cernaro V, Costa S, et al. The relationship between coping, emotion regulation, and quality of life of patients on dialysis. *Int J Psychiatry Med*. 2017;52(2):111-123.

Zamanian H, Poorolajal J, Kharameh ZT-. Relationship between stress coping strategies, psychological distress, and quality of life among hemodialysis patients. *Perspect Psychiatr Care*. 2018;54(3):410-415.

Hassani, P. *et al.* (2017). The process of transition to hemodialysis: A grounded theory research. Iran J Nurs Midwifery Res 22(4).

Chiaranai, C. (2016). The lived experience of patients receiving hemodialysis treatment for end-stage renal disease: a qualitative study. J Nurs Res 24(2).

Hagren, B., *et al.* (2001). The haemodialysis machine as a lifeline: experiences of suffering from end-stage renal disease. J Adv Nurs 34(2).

Contact Information

Taylor Perry
UBC Faculty of Medicine
MD Candidate 2021
Email: taylor.perry@alumni.ubc.ca