

# The Status of Hope in Chinese Patients on Peritoneal Dialysis: A Mixed Methods Study



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## Introduction

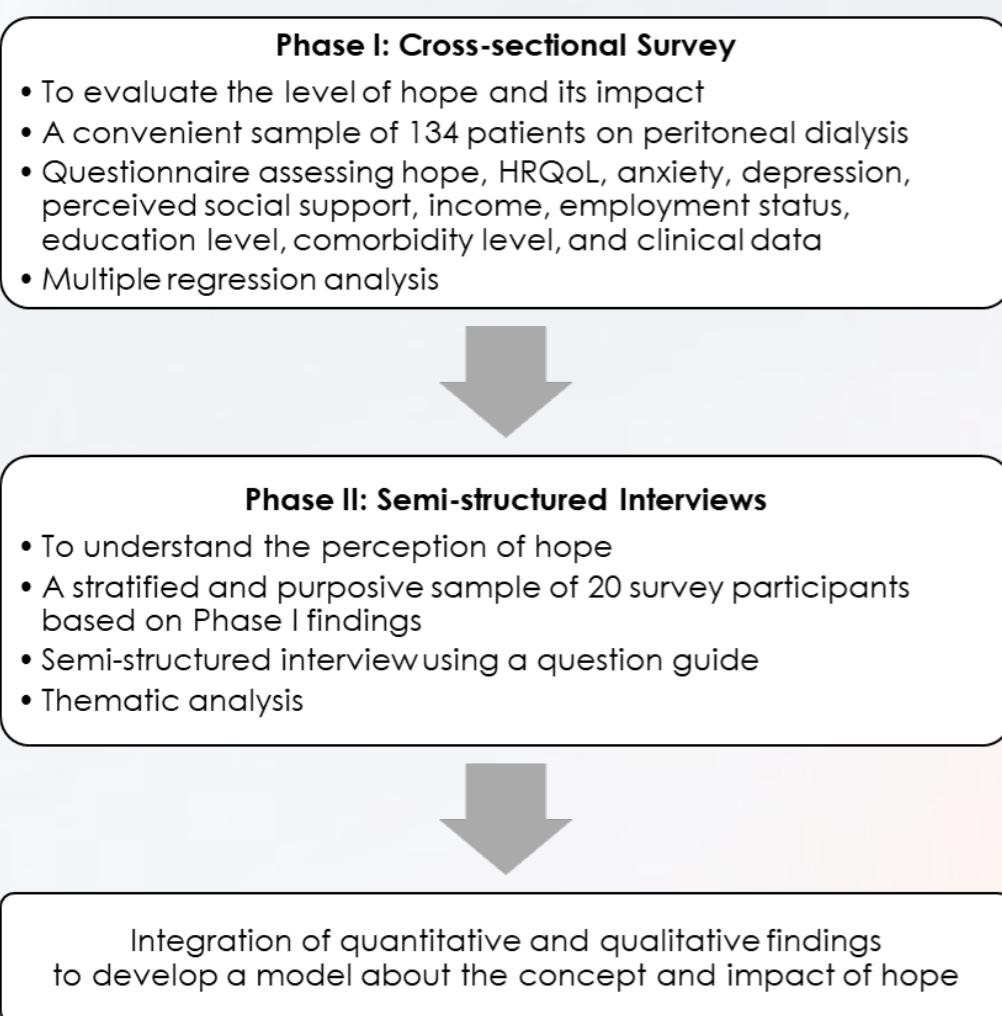
- Patients with end-stage renal disease foresee uncertainties about their future and experience hopelessness.
- In positive psychology, hope is defined as the perception that one can reach a desired goal, which may help patients to regain control over uncertainties.<sup>1</sup>
- Pathways and agency thinking, the two components of hope theory, refers to the perceived availability of plans and ability to achieve the goal.<sup>2</sup>
- A higher level of hope is associated with better health-related quality of life (HRQoL) and mental health.<sup>3</sup>
- Evidence about hope of Chinese patients on peritoneal dialysis (PD) remains limited.

## Aim of the Study

- To develop a model to understand the level, concept, development, and impact of hope in Chinese renal patients on PD.

## Methods

- Explanatory sequential mixed methods study



**Settings:**  
2 local regional hospitals

**Participants:**  
134 adults on PD for ≥3 months

**Instruments:**  
Adult Trait Hope Scale,<sup>4</sup> Kidney Disease Quality of Life 36,<sup>5</sup> Hospital Anxiety & Depression Scale,<sup>6</sup> Multi-dimensional Perceived Social Support Scale,<sup>7</sup> Davies Score<sup>8</sup>

- Ethical approval from the Joint CUHK-NTEC Clinical Research Ethics Committee (Ref. No.:2020.564)

## Results

### Phase I (N=134)

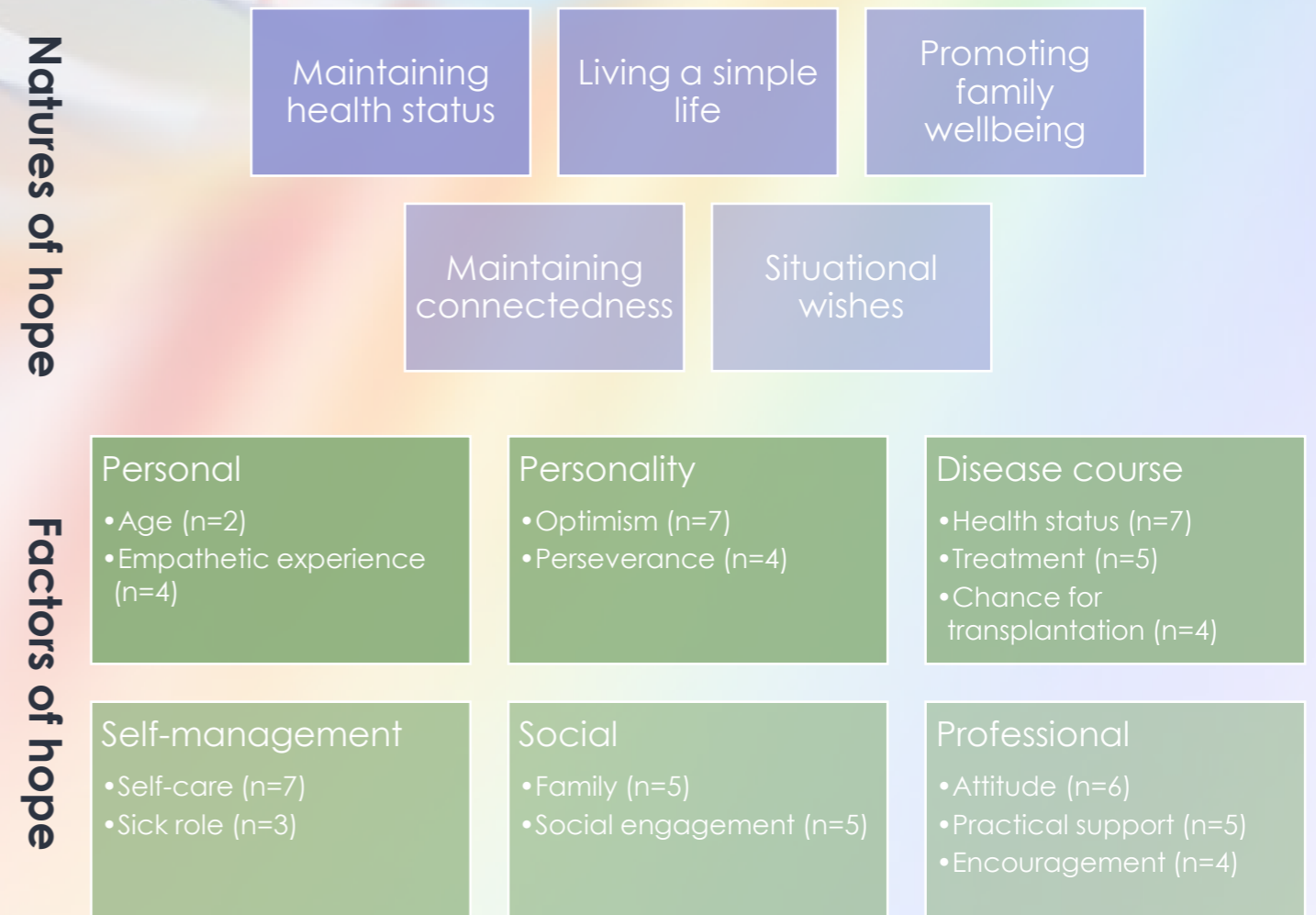
- Majority was Male (64.9%) on continuous ambulatory peritoneal dialysis (CAPD; 70.9%).
- Mean age was 60.6 years on PD for around 4 years.
- Hope was associated with mental wellbeing and depression

Outcome variables	Adult Trait Hope Scale		
	Agency	Pathway	Total
<b>KDQOL-36 physical component summary<sup>a</sup></b>			
R <sup>2</sup>	0.22	0.22	0.22
B	0.16	0.11	0.08
SE	0.16	0.10	0.08
Beta	0.09	0.07	0.09
t	0.97	0.77	0.93
p	0.334	0.443	0.352
<b>KDQOL-36 mental component summary<sup>b</sup></b>			
R <sup>2</sup>	0.08	0.08	0.08
B	0.29	0.29	0.17
SE	0.16	0.14	0.08
Beta	0.16	0.18	0.19
t	1.81	2.06	2.08
p	0.072	0.041*	0.039*
<b>HADS depression subscale<sup>c</sup></b>			
R <sup>2</sup>	0.27	0.24	0.26
B	-0.24	-0.17	-0.12
SE	0.07	0.06	0.04
Beta	-0.31	-0.23	-0.30
t	-3.48	-2.73	-3.34
p	0.001*	0.007*	0.001*

\*p<0.05  
<sup>a</sup>Adjusted for MDPSS (family, friends & significant others subscales), Davies score, employment status  
<sup>b</sup>Adjusted for MDPSS (family subscale)  
<sup>c</sup>Adjusted for MDPSS (family & friends subscales), employment status  
 Abbreviations: HADS = Hospital Anxiety and Depression Scale; KDQOL-36 = Kidney Disease Quality of Life 36; MDPSS = Multidimensional Perceived Social Support Scale; SE= Standard error

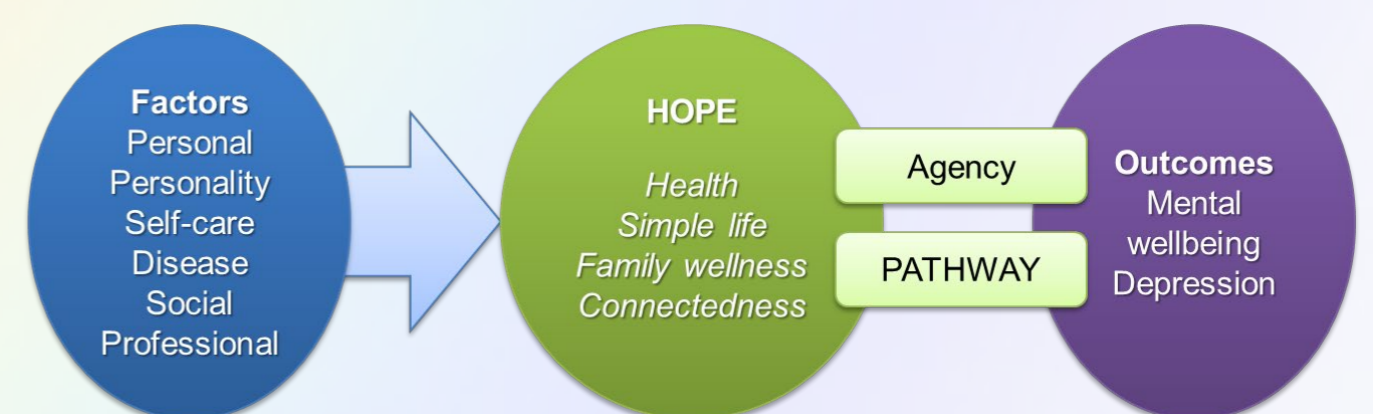
### Phase II (N=20)

- 2 themes: 'natures of hope' & 'factors of hope'.



## Conclusion & Implications

- While a relatively lower level of hope was found in these patients, understanding about its impact and associated factors was advanced.



- Psychological and spiritual care needs to be reinforced and modified to address the needs of Chinese patients, including an emphasis on pathway thinking, as well as a focus on the present moment and connectedness.
- Given the negative impact of hopelessness, regular follow-up that includes the input of psychological and spiritual care professionals is warranted.

**References:** 1. Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14. / 2. Snyder, C. R., Rand, K. L., & Sigmon, D. R. (2009). Hope theory: A member of the positive psychology family. In: Snyder CR, Lopez SJ (eds), *The Oxford handbook of positive psychology* (pp. 257-276). New York, NY: Oxford University Press. / 3. Billington, E., Simpson, J., Unwin, J., Bray, D., & Giles, D. (2008). Does hope predict adjustment to end-stage renal failure and consequent dialysis? *British Journal of Health Psychology*, 13(4), 683-699. / 4. Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., ... & Harney, P. (1991). The will and the ways: development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, 60(4), 570-585. / 5. Hays, R. D., Kallich, J., Mapes, D., Coons, S., Amin, N., Carter, W. B., & Kamberg, C. (1997). *Kidney Disease Quality of Life Short Form (KDQOL-SFTM), Version 1.3: A manual for use and scoring*. RAND Corporation. / 6. Zigmund, A. S., & Snaith, R. P. (1983). The Hospital Anxiety and Depression Scale. *Acta Psychiatrica Scandinavica*, 67(6), 361-370. / 7. Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52(1), 30-41. / 8. Davies, S. J., Phillips, L., Naish, P. F., & Russell, G. I. (2002). Quantifying comorbidity in peritoneal dialysis patients and its relationship to other predictors of survival. *Nephrology Dialysis Transplantation*, 17(6), 1085-1092.