

Lung and Heart Transplant Recipients' Health Status, Social Support, and Avoidant Coping Predict Quality of Life One Year Post-Transplant

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Introduction

- QOL is a key factor to assess the overall value of transplantation.
- Transplantation and its aftermath resembles a chronic stress situation.
 - psychosocial resources
 - coping strategies
- Psychosocial resources and coping strategies may predict QOL post-transplant.

Study Questions

- Do lung and heart recipients differ in temporal patterns of QOL change?
- Do lung and heart transplant recipients differ in levels of psychosocial resources and coping strategies?
- Can perioperative psychosocial resources and coping strategies predict QOL one year post-transplant?

Study Sample

230 potential lung and heart recipients



↳ (- 20 refused participation)

210 lung and heart recipients enrolled in study



↳ (- 17 refused follow-up)

↳ (- 15 death/too ill)

**Final sample = 178 (85%) completed interviews
(Lung = 101, Heart = 77)**

Demographic Characteristics

	Lung	Heart
Gender (% female)	50.5	29.9
Age (% \leq 50)	33.7	29.9
Race (% White)	94.1	88.3
Education (% \leq High School)	52.5	47.4
Income (% \leq \$39,999)	62.4	68.9

Medical Characteristics

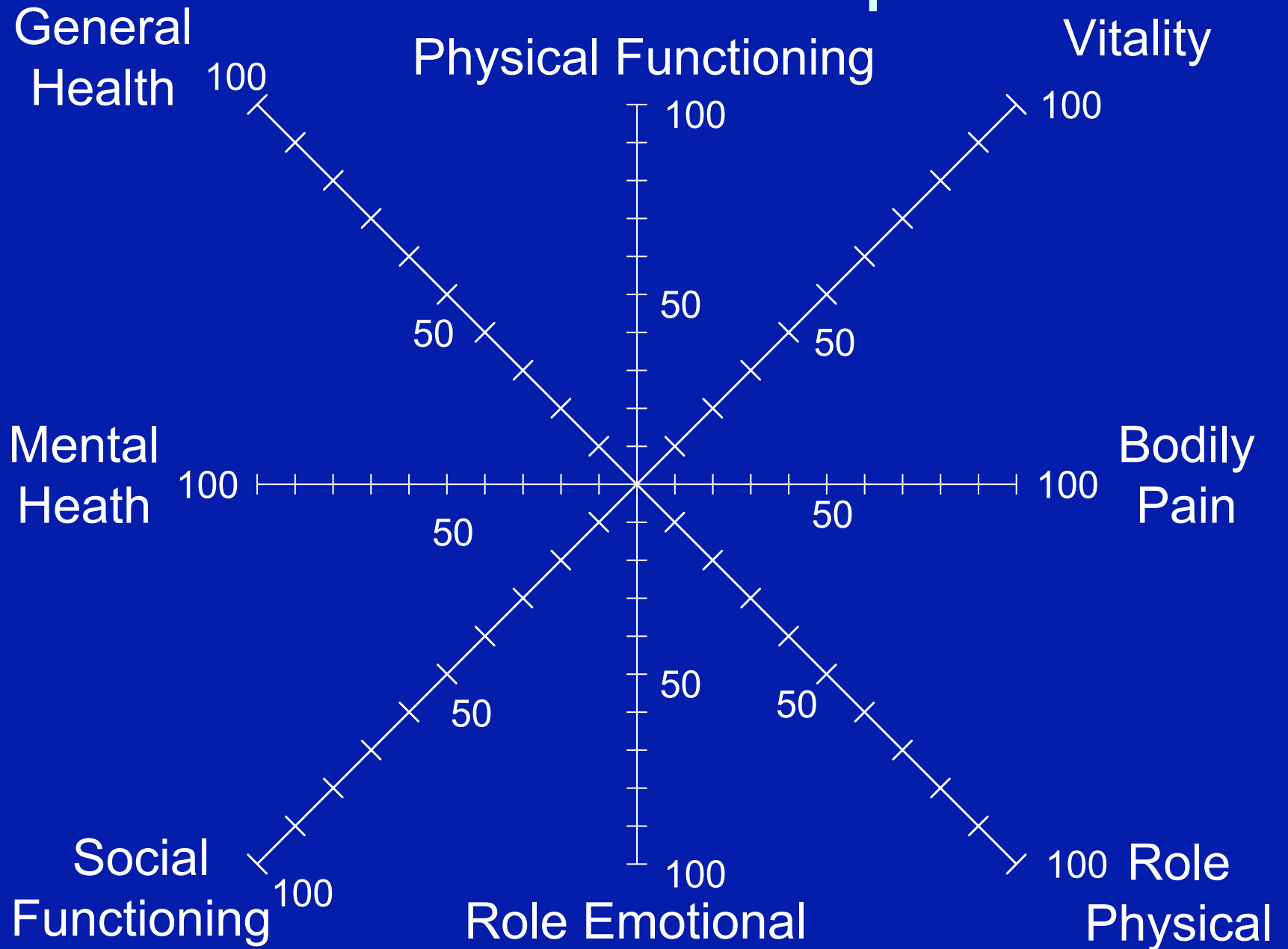
	Lung	Heart
Top indication for transplant	COPD/ Emphysema	Idiopathic Cardiomyopathy
Months waiting - M(SD)	21.3 (17.7)	15.0 (19.6)
Days in hospital - M(SD)	31.4 (22.7)	21.1 (14.1)
Karnofsky score - M(SD)	2.8 (1.2)	2.5 (1.1)

QOL

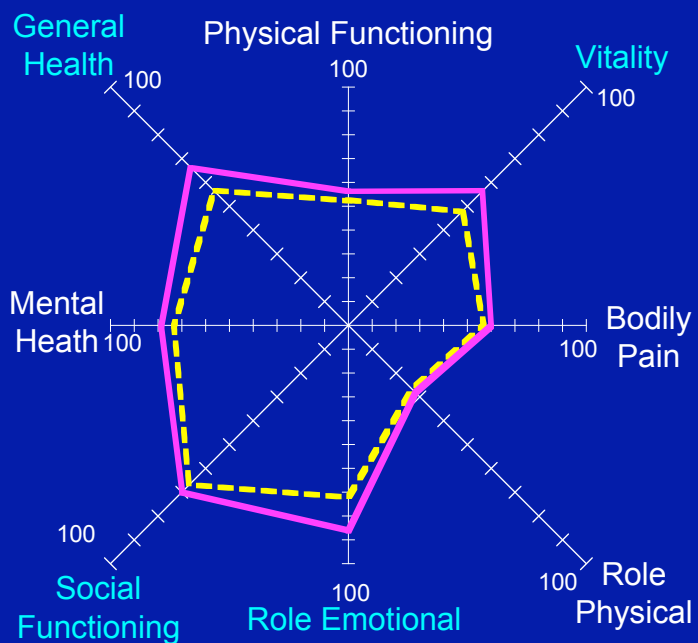
Medical Outcomes Short Form (SF-36)

- General Health
- Physical Functioning
- Vitality
- Bodily Pain
- Mental Health
- Social Functioning
- Role limitations due to physical health
- Role limitations due to emotional health

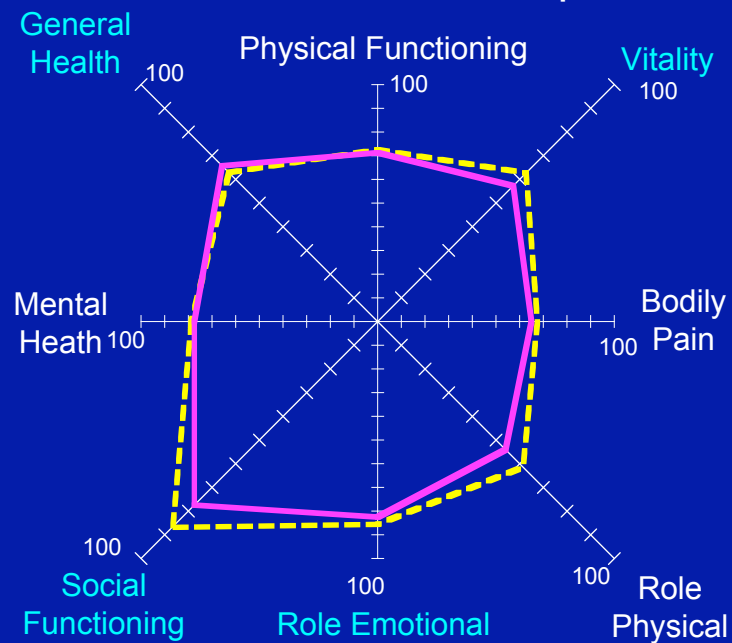
QOL Polar Graph



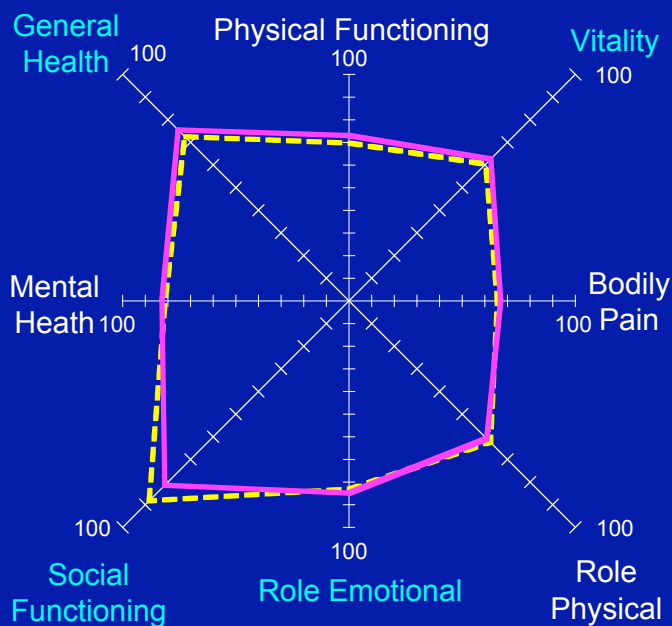
2 Months Post-Transplant



7 Months Post-Transplant



12 Months Post-Transplant



Psychosocial Resources - M(SD)

	Lung	Heart
Optimism	3.9 (0.6)	4.0 (0.6)
Sense of Mastery	3.0 (0.4)	3.0 (0.5)
Caregiver Support	4.4 (0.6)	4.3 (0.6)
Friend Support	2.1 (0.6)	2.2 (0.5)
Religiosity**	0.6 (0.3)	0.8 (0.2)

** $p < .01$

Coping Strategies

28-item Brief Cope Scale

- **Active Planning** - I took action to try to deal with the problem
- **Seeking Support** - I tried to get emotional help from other people
- **Avoidant Coping** - I turned to work on other activities to take my mind off things
- **Acceptance** - I learned to live with it

Coping Strategies - M(SD)

	Lung	Heart
Active	3.0 (0.8)	3.0 (0.8)
Support Seeking	2.4 (0.7)	2.3 (0.6)
Avoidant	1.2 (0.3)	1.2 (0.3)
Acceptance	2.5 (0.7)	2.5 (0.6)

2 Months Post-Transplant

1 Year Post-Transplant

Demographic/
Health Factors



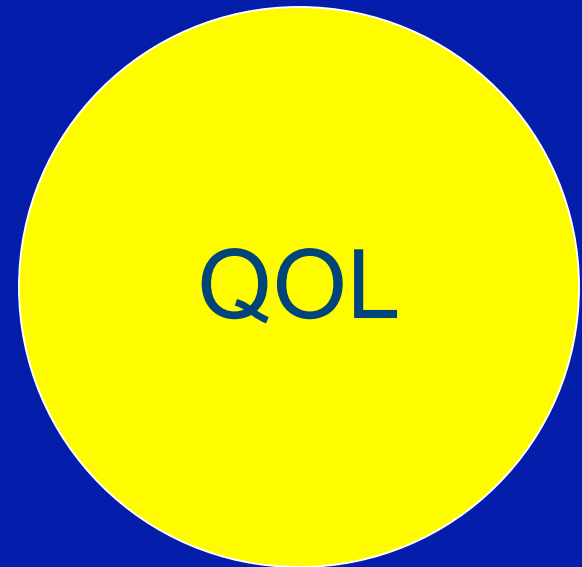
Psychosocial
Resources



Coping
Strategies



QOL



Significant Predictors of QOL

Demographic/Health Factors

QOL Outcomes

Karnofsky Score (lower)

↑ All scales

Age (younger)

↑ Physical functioning,
↑ Role physical

Education (higher)

↓ Bodily pain

Significant Predictors of QOL

Psychosocial Resources/
Coping Strategies

QOL Outcomes

Optimism (greater)

↑ General health
↑ Vitality
↑ Social functioning
↑ Mental health

Friend Support (greater)

↑ Vitality
↑ Mental health

Caregiver Support (greater)

↓ Bodily pain

Avoidant Coping (greater)

↓ Physical functioning

Summary of Results

- Course of QOL improvement is different for lung and heart transplant recipients, but QOL is the same at 1 year post-txp.
- Key factors shortly post-transplant including health status, optimism, and social support predicted better QOL.
- Avoidant coping predicted poorer QOL.

Implications

- Transplant team members can allay some of lung patients' worries about post-transplant recuperation.
- Clinical interventions should be tailored to patients' psychosocial assets and liabilities.