Introduction

- Acute rejection is a major cause of death and disability after transplantation.
- Effective self-care behaviors can reduce onset of acute rejection or monitor for its occurrence, thereby leading to early treatment and reducing death and disability.
- A literature review found that non-adherence to the medical regimen increased the risk of acute rejection in kidney, liver, and heart transplants. There is scant literature on the correlation of patient outcomes and self-care behaviors in lung transplant patients.
- Meleis’s Transition Theory guided the study as transplantation represents a transition between illness and health.

Methods

- Site: A large academic transplant center on east coast of US
- Sample: English-speaking adults placed on the waiting list according to the center’s protocol.
- Consent was signed after placement on the waiting list for lung transplantation. Demographic information was obtained.
- Participants underwent surgery when a suitable donor was available. The EHR was then reviewed for transplant-specific information: age, disease severity using Lung Allocation Score (LAS), primary insurer, transplant type, and Primary Graft Dysfunction (PGD) grade on POD 3
- At 1, 3 and 6 months after transplantation, The Health Habits Assessment was completed to gather patient-reported information about self-care behaviors, and the EHR was reviewed to assess for episodes of rejection.
- Descriptive statistics characterized the sample.
- Univariate logistic regression of acute rejection on demographic and other control factors was performed.
- Control factors with p < 0.30 in these univariate models were retained for use in multivariate models.
- Univariate and multivariate logistic regression was then performed to determine which self-care behaviors were predictors of rejection. For multivariate models, a backward, stepwise approach was used to obtain parsimonious models with < 4 predictors. This was done to reduce model overfitting.

Results

- 63 participants underwent transplantation with 4 dying and 28 developing acute rejection.
- There was no reported smoking.
- Univariate analysis led to the following control variables being selected for inclusion in multivariate models: race, employment status, annual household income, LAS, and PGD grade on POD 3
- Univariate analysis of acute rejection on self-care behaviors showed that none of the identified self-care behaviors were independent predictors of acute rejection.

References