

Q-methodology to identify young renal transplant recipients at risk for non-compliance

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Background: Literature suggests that adolescent kidney transplant recipients may display patterns of behaviour that can seriously affect graft survival. Indeed, we concluded from analyses of all kidney transplantations performed in our center from 1971-2005 that the 10 years graft survival in young adults (18-25years) was significantly worse ($p < 0.0001$) compared to that in recipients > 25 years: 47.2% versus 64.0%. Non-compliance could be one of the contributing factors and therefore we tried to identify young adults at risk for such behaviour.

Method: We used Q-methodology to structure an attitude typology from rank-ordered opinion statements (Q-sample). Participants sort statements along a continuum of preferences to reveal categories of individuals who share common viewpoints. The goal of Q-methodology is to uncover different patterns, not their distribution among a population. Data analysis is performed using by-person, rather than by-variable factor analysis, which allows ex-

ploration of attitude either cross-sectional or longitudinally over time.

Results: We distinguished four significant different profiles in a group of 26 young adults (18-25years) that participated in the study, by sorting 37 statements in the Q-sample.

A) Concerned & Controlled, B) Appearance orientated & Uncommunicative, C) Opinionated & Independent, D) Easy going & Pliable. Another cohort of young patients ($n=27$) was asked to identify themselves according to the results of the Q-method. Their answers discriminated equally well between the four profiles. The intrinsic differences concern the way they cope with the medical regime and their fear for rejection of the graft. Parents' behaviour appeared not to play a decisive role in differentiating between the four profiles.

Interpretation: Profiles A and B are associated with compliant behaviour while patients with profile A run a high risk of depression. Patients with profile C hate living by rules, find it hard to comply but nevertheless do try. Profile D is a sure sign for non-compliant risk taking behaviour. We conclude that Q-methodology is able to distinguish behaviour patterns in young renal transplant recipients. With the outcome young adults may identify themselves and their inherent risk for non-compliance, which can be of help for health care professionals in their attempts to tailor the medical regime.