

University of Groningen

Perceived health status after kidney transplantation

Rosenberger, Jaroslav

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version

Publisher's PDF, also known as Version of record

Publication date:

2006

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Rosenberger, J. (2006). *Perceived health status after kidney transplantation*. s.n.

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Summary

A substantial number of patients with end-stage renal disease require lifelong renal replacement therapy. Dialysis (hemodialysis and peritoneal dialysis) and kidney transplantation are common treatment modalities of kidney failure. Kidney transplantation is the method of choice among renal replacement therapies due to its superior results in mortality, morbidity, cost utilization and quality of life in comparison to dialysis. While the research into graft and patient survival after transplantation is quite impressive, less information is available about quality of life and perceived health status. For this reason, this study focuses on this aspect.

The disablement process is represented by the direct pathway starting from pathology and leading to impairments, activity limitations and ending with the restrictions in participation. Because participation restrictions may be consequences of disease, alterations in perceived health status are reported as well. Any significant pathology therefore modifies perceived health status and quality of life.

The research into perceived health status after kidney transplantation is mostly focused on the description of its determinants, resulting in a variety of medical and non-medical factors with possible impacts. However, studies aiming at a comprehensive assessment of several predictors of perceived health status are lacking. As both medical and non-medical variables are linked to perceived health status, the following questions in the population of kidney transplant recipients are discussed in this thesis.

- 1 *Are the differences in perceived health status between transplant and dialysis populations based on modality of therapy or on selection bias?*
- 2a *Which medical variables (kidney function, adverse effects of immunosuppressive treatment, co-morbid diseases, duration of kidney disease, number of hospitalizations, period after transplantation) influence perceived health status?*
- 2b *What is the relation of adverse effects of treatment and noncompliance with the therapy to perceived health status? Is noncompliance related to adverse effects of treatment?*
- 2c *Are there non-medical confounders (age, gender, socio-economical status, social support) that are related to perceived health status in addition to medical variables?*

Chapter 2 presents a comparison of perceived health status between dialysed and transplanted patients as well as dialysed patients on waiting lists for cadaveric transplantation and incident kidney transplant recipients 3 months after kidney transplantation, matched for age, gender and co-morbidity was performed. The results prove that perceived health status after kidney transplantation is much better than on dialysis. But when patients after kidney transplantation were compared to their matched pairs of dialysed patients on waiting lists, no differences in perceived health status were found. Differences in perceived health status between transplant and dialysis patients seem therefore to be influenced by a significant selection bias.

Medical predictors of perceived health status in kidney transplant recipients are explored in Chapter 3. Medical variables have a relationship to physical perceived health status in particular, as they can explain up to one third of its variance. Age was found to be the most important predictor of perceived health status in patients after kidney transplantation. When patients were not stratified by age, the analysis of other predictors of perceived health status had very limited results. After stratification by age, significant differences in predictors of perceived health status were found between the age categories – better kidney function predicted good perceived health status in patients younger than 45 years, while fewer hospitalizations had more positive effect on older patients.

In Chapter 4 side-effects of immunosuppressive treatment and noncompliance with the therapy are discussed, as they are important transplant-specific variables. The most stressful non-infectious non-oncological adverse effects of immunosuppression are pain, weakness, cosmetic changes and psychological symptoms. The stress from adverse effects is higher in women and less educated patients, and the use of new drugs exhibits less stress in some symptoms.

Of the personal factors modifying the disablement process, noncompliance with the therapy has very important clinical consequences, and we explore its predictors in Chapter 5. Higher stress from adverse effects is a strong predictor of noncompliance with the therapy (12.3-times higher risk) together with male gender (7.5-times higher risk), worse perceived health status (4.5-times higher risk) and fair satisfaction with social support (4.5-times higher risk).

The analysis of several medical and non-medical predictors of perceived health status is presented in Chapter 6. Side-effects of therapy are the most important predictor of perceived health status for all age groups. Perceived health status of patients younger than 40 years mostly depends on their renal function and the level of their social support. Education and working activities are most important for middle-aged people, whereas in patients older than 60 years perceived health status is mostly affected by co-morbidity.

In the last chapter, general discussion and conclusions are proposed. Based on the conclusion and the given results, clinical consequences and recommendations for practice are formulated and the possibilities for future research are suggested as well.

1. Intensive attention should be paid not only to transplant recipients, but to patients on waiting lists as well. Their education and information about future transplantation requires constant updates to improve their co-operation thereafter.
2. It is necessary to stratify the patient sample by age when evaluating perceived health status.
3. As adverse effects of immunosuppressive treatment are the main stressor for transplanted patients, their continuous assessment is crucial. The detection of patients with low adherence to the therapeutic regimen is a prerequisite for possible actions aimed at improving their compliance and therefore reducing the threat of rejection and late graft loss.
4. Non-medical variables are as important predictors of perceived health status as the medical ones. Creation of multidisciplinary transplant teams and intensive collaboration with patients' families are necessary to assure better perceived health status as well as the patients' active rehabilitation and reintegration into society.
5. Longitudinal research with the aim of addressing the effect of time on perceived health status is necessary as well as long-term evaluation of compliance with the immunosuppressive treatment.

