

## Abstract

Imperfect patient adherence to treatment leads to adverse individual and social outcomes: it has negative effect on patient health and, consequently, it increases health care costs. The adherence is low particularly in chronically ill patients with complex regimen, such as hemodialysis. This thesis provides an in-depth study of the phenomenon and presents a survey targeted at hemodialysis patients in the Czech Republic. The survey assesses prevalence of nonadherence, identifies predictors of nonadherence, and analyzes patients' attitude to a hypothetical incentive program to promote adherence. Then, an optimal design of an intervention to promote adherence is discussed.

Results show that 72% of patients do not adhere to one or more areas of hemodialysis treatment. Prevalence of nonadherence is highest for following fluid restrictions (62.8%) and diet guidelines (55.7%). On the contrary, medication and appointment nonadherence is not frequent. Strongest predictors for nonadherence are: young age, male sex, treatment for depression, number of prescribed pills, and length of dialysis treatment.

Most of patients (83%) indicated that they would change their behavior when involved in an incentive program to promote adherence. With regard to broad prevalence of nonadherence, an intervention targeted at fluid and diet nonadherence is recommended for its potential to improve patients' health and reduce health care costs.