

Executive Summary  
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## **A Case Study Examining a Self-Efficacy Intervention in a Peritoneal Dialysis Patient in the Home**

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### Project Overview

The problem that this case study addressed was that peritoneal dialysis (PD) patients often struggle with self-efficacy in managing their PD in the home. This qualitative explanatory, case study used the methods of Robert K. Yin to examine the self-efficacy of patients in managing PD at home. The unit of analysis was the patient in which each patient served as their own case. Boundaries of the case included that the patients were female, of similar age, lived in the state of Minnesota, had no cognitive decline and were able to perform their own PD. The study included a nurse practitioner (NP) led intervention in the home based on Albert Bandura's Self-Efficacy Theory. The NP focused on the four sources of self-efficacy: vicarious experience, modeling, verbal persuasion and somatic concerns. The two patients, each representing a case, received two home visits one month apart. One patient received the intervention and one patient served as a comparison. The intervention patient received a history and physical exam, medication review, a review of laboratory results, and teaching regarding strategies to reduce the risk of peritonitis. Five propositions were derived from the theory to guide the intervention and for explaining the differences in the two participant's experience regarding their self-efficacy in managing their PD. Data collection at each home visit included interviews, use of field notes, and journaling, along with having each participant complete The General Self-Efficacy Scale (GSES). The comparison patient only received the interview and GSES. The analysis employed deductive coding of the qualitative data to generate initial patterns matched to the elements of the theory. Inductive coding of the qualitative data and triangulation with the results of the GSES was used to develop themes that explained self-efficacy of conducting PD at home.

### Project Implementation

Ethical approval was obtained both from the Mayo Clinic, Rochester, MN; and St. Catherine University, St. Paul, MN. Two home visits for each patient were completed one month apart. All home visit were audio recorded.

### Project Outcomes

The qualitative analysis indicated that the two cases demonstrated elements of self-efficacy prior to the intervention. The GSES were similar at the initial visit, representing some self-efficacy, which on the surface indicated that the patients were doing well with their PD. Both cases had an improved GSES score at the second visit, which provides some support for the NP's presence in the home adding to the self-efficacy for both patients, even when no intervention was being done.

The themes that emerged from the intervention participant included getting healthy to achieve the prize of kidney transplant, being proud of one's progress, cultivating support, and resourcefulness. The comparison case's themes included serenity, knowing what to do, valuing relationships and making this work. In contrast to the comparison case, more issues became apparent during the intervention case at the second home visit. Issues emerged only when the NP conducted the self-efficacy intervention and not with the second interview. The NP being fully engaged in care set the stage for greater understanding of the patient and their issues, the effect of the home environment, and abilities of the patient for actually carrying out home PD. Some of the issues at the second home visit included reusing drain lines, placing the drain line down the bathroom sink, location of hand soap and not understanding which type of dialysate concentration to use for hypertension. Just being present in the home, as with the comparison patient, did not facilitate understanding the patient's true experience in performing PD at home. The data for the comparison patient did not really change from the first to the second visit and the patient continued to demonstrate self-efficacy, with no problems identified.

#### Recommendations

More studies are needed to examine if home visits would positively impact PD patients. Moreover, self-efficacy theory could be implemented with the home visits. Strategies are needed to increase the number of PD patients including an infrastructure that supports success and well-being of patients maintained on PD.