An Educational Project for Hemodialysis Patients to Promote Self-Management Behaviors of End-Stage Renal Disease

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Introduction

- Patient education is essential in individuals who have end-stage renal disease (ESRD) to promote self-management behaviors.
- The modifiable risk factors in ESRD to be addressed through patient education are diet, medication, and treatment adherence.
- The Kidney Disease Quality Outcomes Initiatives (KDOQI) guidelines recognize the following as key outcome measure to reduce mortality rates:
  - Adequacy of Dialysis
  - Nutrition
  - Anemia Management
  - Early Arteriovenous Access Placement
- Healthcare professionals (HCPs) must be able to communicate effectively to influence self-management behaviors.
- HCPs have an obligation to educate ESRD patients with ESRD on disease processes, treatment options, treatment adherence, medications, and dietary restrictions.

Study Purpose

The purpose of this project was to determine if an educational program for patients within 6 months of initiation of dialysis would increase patient knowledge levels of ESRD management.

Study Design

- A consecutive sample of individuals who were on HD for ≤ 6 months (n=26) participated in the study.
- The Chronic Hemodialysis Knowledge Survey (CHeKS) is a valid and reliable tool for measuring knowledge of ESRD self-management. This 23-item tool was administered pre- and post intervention.
- The intervention involved:
  - Development of an ESRD handbook based on KDOQI practice guidelines, which was given to participants.
  - 30 minute one-on-one educational sessions twice a week for 4 weeks to review material in the handbook provided by the investigator who is board certified as a family nurse practitioner (FNP-BC) with extensive experience in ESRD.

Results

- CHeKS pre-test and post-test total correct mean score was 15.27 (SD 4.23) and 20.65 (SD 2.38), respectively.
- The raw scores ranged from 3-21 pre-test and 15-23 post-test.
- Using the paired t-test, the gain between pre- and post-test scores of 5.38 was found to be statistically significant ($t = 6.682, p < .000$).

Discussion

- Knowledge scores increased in patients with ESRD when educated about their medical and self-management needs.
- One-on-one sessions allowed individualized instructions to review the ESRD handbook and provided opportunities for questions from the participants.
- Knowledge scores improved after the intervention from 66% to 90% using the CHeKS instrument of measurement.
- Two most frequently missed questions from post-test scores indicated that more emphasis is needed on available treatment modalities and exercise regimens in ESRD.

Conclusions

Comprehensive educational programs for ESRD patients on HD may improve knowledge and empower patients in their care. The ESRD educational project focused on improving patient knowledge to promote self-management behaviors and treatment adherence.

Recommendations

- Additional longitudinal studies are suggested to evaluate patient outcomes, self-management behaviors and the effects on mortality and morbidity rates.
- Innovative nursing strategies are recommended to promote self-efficacy in care to include:
  - Customize treatment plan through patient-nurse collaboration.
  - Encourage patient participation to maintain sense of control in care.

References


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For Further Information

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