



Service Priorities and Programmes Electronic Presentations

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Nocturnal Home Haemodialysis (NHHD) is a Sustainable Program for patients and nurses to meet the increasing dialysis demand - A single center, retrospective study

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Introduction

Since 2007, alternate night nocturnal home haemodialysis (NHHD) program was initiated in our unit for end stage renal disease (ESRD) patients as an alternative form of renal replacement therapy to meet the increasing demand for center haemodialysis (CHD) due to rising number of patients with peritoneal dialysis failure. As compared with CHD, NHHD empowered patients to have more flexible dialysis schedule and to resume employment due to daytime freedom from dialysis. They have less fluid and diet restriction as a result of frequent haemodialysis which improved their quality of life. NHHD nurses played a vital role in the comprehensive training program. They performed pre-training patient assessment, offered home visits and home modification advice. They also provided vascular access education, intensive dialysis training and conducted examinations before patients could graduate to practice NHHD. Post-training home visit and tele-consultation via tablet computers were employed to ensure patients' safety at home.

Objectives

We postulate that NHHD is a sustainable program for patients and nurses to meet the increasing haemodialysis demand with satisfactory patient outcomes.

Methodology

A retrospective cohort study was conducted to investigate the effectiveness of the NHHD program in our unit from May 2007 to November 2017. All patients who were recruited into NHHD training were evaluated. Baseline demographics and employment data were captured. Data are expressed in mean \pm standard deviation. Patient sustainability is defined as continuation of employment after dialysis and service sustainability as the number of nurses needed to operate the unit.

Result

Two core NHHD nurses maintained the operation of the NHHD unit. 103 patients were recruited for NHHD training. 4 patients failed and 2 dropped out due to renal

transplantation. 97 patients graduated and started NHD. Their mean age was 44.4 \pm 10.2 years old. The mean training period was 14.6 \pm 4.7 weeks. By November 2017, there were 66 active NHD patients. 2 patients switched to CHD, 20 had kidney transplantation, and 9 died from dialysis-unrelated complications. The mean living area for these patients were 603 \pm 225 square feet, with the smallest flat of 180 square feet only, 77.3% of our patients were employed in various jobs, much higher than reported data oversea.