

The Use of A Trained Healthcare Assistant in Maintaining Quality Nursing Care for Inpatients Required Peritoneal Dialysis

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Introduction

Kidney failure is a major health challenge across the world. Ministry of Health Singapore has been working with hospitals to recommend Peritoneal Dialysis (PD) as the preferred dialysis option for patients with kidney failure.

PD is a home-based treatment, non-invasive, simple but time consuming (procedure time can be up to 180 minutes / patient / day). Patient / Caregiver performs PD at home upon completion of PD training. However, when patients required PD admitted to hospitals, the PD procedures are commonly set to be performed by PD trained nurses only. Therefore, nursing manpower shortage often limits the growth of PD uptake.

Aim

This project explored the possibility of having healthcare support staff, namely Healthcare Assistant (HCA), to perform PD procedures in hospital setting.

Project Summary

A project of using a trained HCA to perform PD procedures was implemented in Renal Centre, Khoo Teck Puat hospital (KTPH) between June 2023 to November 2023.

One Senior HCA from Woodlands Health (WH) was selected and trained by KTPH Renal Centre PD nurses to provide certain PD procedures, namely PD exchanges and PD catheter exit site dressing. After the completion of skill-based competency assessment and On-Job-Training, the trained HCA started performing the trained PD procedures for KTPH inpatients under the supervision of KTPH PD nurses.

Project Timeline	March 1 - 31, 2023 (30 days)	June 6 - 9, 2023 (4 days)	June 12-23, 2023 (14 days)	June 26, 2023 – November 30, 2023 (5 months)
Candidate Selection	√			
In-Centre Training & Competency Assessment		√		
On-Job-Training			√	
Practice Under Supervision				√

Results

	Pre-Implementation Data	Post-Implementation Data
Nursing Manpower Requirement	One RN/EN per Nursing shift for inpatient PD Procedures	One HCA per Nursing shift for inpatient PD Procedures
Nosocomial PD related Infections	<ul style="list-style-type: none"> Peritonitis – 0 case Tunnel Infection – 0 case Exit Site Infection – 0 case 	<ul style="list-style-type: none"> Peritonitis – 0 case Tunnel Infection – 0 case Exit Site Infection – 0 case
Patients / Family Feedback in Relation to PD Care during Hospitalization	0	0
HCA Feedback towards Additional Learning of PD Procedures	N.A.	“Simple tasks”

Discussion

This project aimed to address the existing concern of higher possibility of developing PD related infections in hospital environment, should PD procedures be performed by Healthcare Assistants instead of Nursing staff. Our project team believes that PD related infections may happen when proper hand hygiene and infection control practice are not strictly followed by any group of healthcare workers during PD procedures. The assumption of nurses having higher compliance, compared to trained Healthcare Assists, in terms of hand hygiene and infection control practice, is not verified.

The project team has implemented the following solutions to address the concerns:

1. Identify suitable candidates who had demonstrated good hand hygiene and infection control practice during her routine work.
2. Provide sufficient training to the selected candidate, by experienced PD nurses.
3. Provide on-site nursing support to the selected candidate.
4. Establish clinical governance to regulate staff compliance and competency level.

In addition, nursing training plans and On-Job-Training duration were revised to facilitate HCA's learning and maintain quality PD care. New workflows were developed to ensure tasks performed by HCA are 100% reviewed by PD trained nurses.

Results had shown that no difference between Renal Centre Nurses performed PD vs HCA performed PD in terms of PD related infections for inpatients during the project period.

Furthermore, Trained HCA is equipped with higher and broader PD competencies, for better career progression track and job satisfaction (potentially).

Limitation

Due to the availability of HCAs in Khoo Teck Puat Hospital and Woodlands Health, project team only managed to include 1 HCA to practice in a single PD centre for a period of 6 months. Future studies involve larger number of HCAs, and more PD centres are needed to validate the observations and findings.

Conclusion

Our project has shown that healthcare support staff, like HCAs, can perform certain simple and non-invasive PD procedures while maintaining quality nursing care for inpatients required PD.

Selection of suitable HCAs, as well as having sufficient training and on-site nursing support to HCAs are the key factors to the success of the project.

By reducing the dependency of nursing manpower for PD services, while maintaining quality nursing care, this project will help hospitals to achieve higher PD uptake amongst new dialysis patients in Singapore.