

# SAFETY OF PEDIATRIC HOME PERITONEAL DIALYSIS BY PRIMARY CAREGIVERS AS A MEASURE OF NURSING CARE QUALITY 2011-2012

## Introduction

Pediatric Chronic Kidney Disease (CKD) is currently considered a high cost disease. It has an emotional, family and social impact on the affected child and his or her primary caregivers, who are presented with the reality of complex needs related to the disease such as Renal Replacement Therapies like Peritoneal Dialysis (PD).

This study evaluates the safety of the process of home dialysis by primary caregivers as an attribute of nursing care quality. Nursing staff are responsible to train, follow and oversee home PD. They must consider environmental factors and supplies, treatment adherence and risk factors as possible barriers to a successful home treatment in these patients.

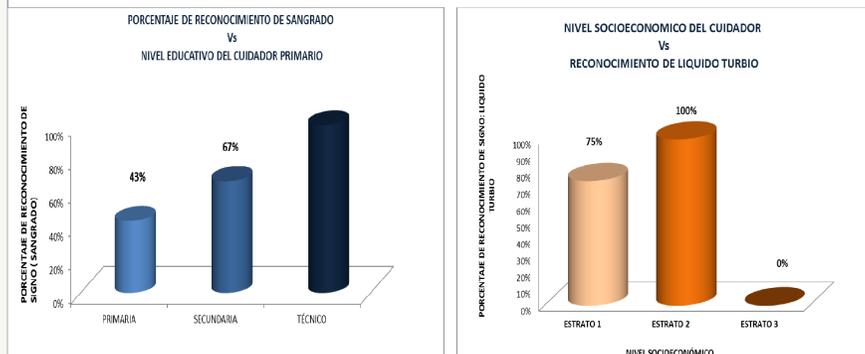
## Objectives

To evaluate the safety of pediatric home peritoneal dialysis by primary caregivers as a measure of nursing care quality.

## Methods

A cross-sectional descriptive study was conducted using convenience sampling of 12 primary caregivers of children between 5 and 18 years of age who were undergoing home PD, seen in the Unidad Renal RTS Versalles Baxter in Cali, Colombia. Data was collected through the use of an instrument designed for home visits "Formato de Visita Domiciliaria por Enfermería-APD" and from medical records. This research was approved by the Ethics committee of Universidad del Valle and Unidad Renal RTS Baxter. Primary caregivers gave their informed consent. The instrument was applied and overseen by nursing staff in urban and rural areas of Valle del Cauca between July 15, 2011 and February 12, 2012. Data was exported to Excel and processed with the SPSS Software 17th version. An univariable and bivariable analysis was conducted using variables from the Formato de Visita Domiciliaria por Enfermería-APD: patient age, type of primary caregiver, socioeconomic status, educational level, housing type, recognition of infection signs, and preparation of the elements for PD.

## Methods (cont.)



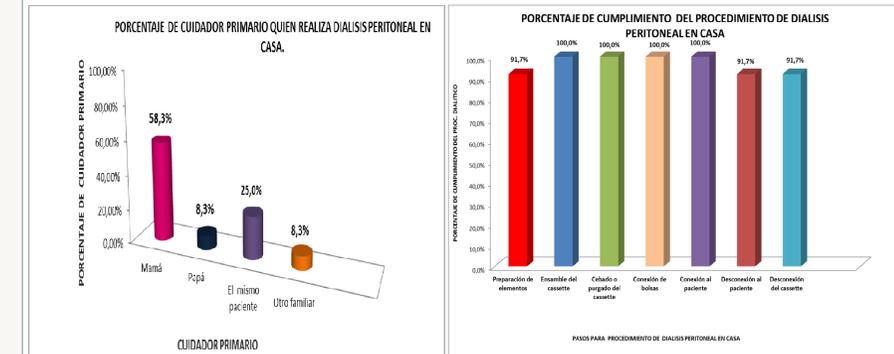
## Results

As to the socioeconomic status, it was identified that caregivers from estrato 3 (middle class) significantly ( $p=0.18$ ) failed to recognize the presence of cloudy fluid as a sign of infection. Nevertheless, upon the second home visit they had followed recommendations given by the nursing staff of the RTS Versalles Baxter. In the bivariable analysis of educational level of primary caregiver vs. recognition of signs of infection, it was observed that of seven primary caregivers with five years of formal education, only 2 were able to recognize the signs of infection (28.6%). Contact with caregivers and the professional orientation by the Nursing staff provide important information. The adherence to the procedure protocol vs. adherence was seen to be 100% on the items evaluated through the home visit questionnaire.

During the second home visit of the original 12 caregivers only four were still on the home PD program, because eight of the patients received a transplant during this period.

Throughout the duration of the study none of the patients had any complications, they maintained normal values without significant change.

## Results (cont.)



## Conclusions

The home visit questionnaire is a useful tool in the evaluation of the patient and/or caregiver's ability to conduct home peritoneal dialysis, the conditions of the exchange place, supplies and the adherence of both the patient and his or her family.

Evaluating the safety of home peritoneal dialysis in children by their primary caregivers should be a requisite for the professional nurse when analyzing care quality, factor for or against success and the strategies that should be in place during renal replacement therapy.

Research in the area of Nursing allows the addressing of not only attention processes, but also of possible areas of intervention, strategy implementation, the recognition of the effectiveness of the care provided by the nursing staff and the possibility of intervening with a multidisciplinary team; having an integral view of the pediatric patient, who is in constant biopsychosocial development.

## Contact

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