

**DETERMINANTS OF PERITONEAL DIALYSIS UTILIZATION IN THE
MANAGEMENT OF END STAGE RENAL DISEASE AT KENYATTA
NATIONAL HOSPITAL, KENYA.**

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DECLARATION

I declare that this thesis is my original work and has not been presented for award of a degree in any other university.


Signature  Date. 13th October 2022

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This thesis has been submitted for review with our approval as the university supervisors.

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ABSTRACT

The rapid growth of the end stage renal disease (ESRD) population requires the utilization of less costly but equally effective strategies for renal replacement therapies (RRT) such as peritoneal dialysis (PD). However, peritoneal dialysis has been reported to be underutilized across the world. The objectives of the study were to assess the level of utilization of peritoneal dialysis in management of patients with end stage renal disease at Kenyatta National Hospital, Kenya. The study adopted a descriptive correlational research design. The target population consisted of 11 nephrologists, 71 renal nurses and 150 ESRD patients. Convenience sampling method was used to identify study participants who included 10 nephrologists, 60 renal nurses and 109 ESRD patients. Data collection was done using self-administered and interviewer administered semi structured questionnaires containing both open ended and closed ended questions. The data was collected from the respondents, cleaned coded and using statistical package for the social sciences computer software SPSS 25. The findings were presented using descriptive statistics. Chi square was performed to determine the association between variables and while logistic regression was used to determine the predictors of PD use. The study findings revealed that peritoneal dialysis was used by only 9% (n= 10) of the respondents compared to hemodialysis which was used by majority (68%, n=73). The findings further revealed that only 25 (36%) of the health care workers prescribed peritoneal dialysis and was commonly 50 (72%) used among the pediatric patients. Chi square findings revealed; on objective two, there was a significant association between age and PD utilization, $\chi^2(2, n=108) = 58.85$, $p=.000$, on objective three, there was also a significant association between training of HCP and PD utilization, $\chi^2(1, n = 108) = 6.188$, $p = .013$, also, there was a significant association between motivation and utilization of PD on patients, $\chi^2(1, n=69) = 4.182$, $p = .041$. On objective four, There was a significant association between availability of PD centers and utilization of PD, $\chi^2(1, n=69) = 0.686$, $p = .000$. There was also a significant association between availability of PD resources and utilization of PD, $\chi^2(2, n=69) = 15.86$, $p = .00$ and Findings also revealed there was a significant association between PD reimbursement policy and utilization of PD, $\chi^2(2, n=69) = 13.82$, $p = .001$. Logistic regression findings further revealed that, holding all other predictor variable constant, the odds of patients utilizing PD increased by 95% CI [0.008-0.925] for a one-unit increase in Patients with college education. And it was found that, holding all other predictor variable constant, the odds of patients utilizing PD increased by 95% CI [0.046-0.793] for a one-unit increase in Patients with knowledge on PD. It was also found that, holding all other predictor variable constant, the odds of HCP utilizing PD in managing patients with ESRD increased by 95% CI [1.028-8.272] for a one-unit increase in HCP trained on PD and the odds of HCP utilizing PD in managing patients with ESRD increased by 95% CI [0.029- 2.195] for a one-unit increase in HCP who are motivated. There was clear evidence that peritoneal dialysis was generally underutilized and its utilization was influenced by several factors. It is needed to make peritoneal dialysis modality accessible to all patients since it is relatively cheap, easy to use, simple and effective.