Medication Adherence Persepectives In Hemodialysis Patients.

A cross–sectional Study from

Madaba–Jordan

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DEDECTION

First of all I will dedicate this study to our Almighty God, who gave me strength and knowledge to accomplish this work.

To my Father and my Mother for their love and overwhelming support and encouragement

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LIST OF ABBREVIATIONS OR SYMPOLS

ABBREVIATION	DEFINITION
ADH	Antidiuretic hormone
CBC	Complete blood count
CKD	Chronic kidney disease
Da	Dalton
DM	Diabetes mellitus
eGFR	Estimated Glomerular filtration rate
ESRD	End stage renal disease
ESRD-AQ	End stage renal disease adherence questionnaire
GFR	Glomerular filtration rate
HD	Hemodialysis
HTN	Hypertension
IDW	Interdialytic body weight

Max	Maximum
Min	Minimum
NPN	Nonprotein nitrogen
PO4	Phosphate
RII	Relative important index
RTA	Renal tubular Acidosis
SD	Standard deviation
SPSS	Statistical Package for the Social Sciences
US	United state
USRDS	United state renal data system
WBC	White blood cell

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ABSTRACT

Poor adherences to hemodialysis (HD) recommendations (fluid restriction, medication regimen, diet recommendations, and attendance at hemodialysis sessions) are the major clinical issues in management of end stage renal disease patients. The aim of this study was to assess the extent of adherence among HD patients to different treatment modalities.

A cross-sectional study of HD patients at Madaba hospitals was performed through three months (November 2017 to January 2018). A total 107 patients were included in the study. Valid and reliable questionnaire (End Stage Renal Disease Adherence Questionnaire: ESRD-AQ) was used to assess adherence behavior. Predialytic serum levels of potassium and phosphate were obtained as clinical indicators of diet and medication adherence respectively. In addition, interdialytic body weight (IDW) was also obtained and analyzed in relation to reported adherence of fluid restriction.

Participants age range was 18 to 80 years old. Compliance rate to diet, fluid, medication, and dialysis were of 52.1%, 55.8, 79.9, and 97.2 respectively. The highest adherence rate was for attendance to dialysis sessions and the lowest was for diet restriction. Old age participants, never married patients, patients with military insurance, and those with three or more children were found more adherent. The Multivariate analysis model of this study indicated that elderly patients who were with military insurance had higher odds of having higher adherence score. The multivariate analysis also showed that people's attitude toward their ESRD had a significantly positive association with their compliance to ESRD diet and treatment plans, $p<0.001$, when considered jointly with the other factors. People with greater attitudes tended to report better compliance to their plans of dialysis, diet, medications, fluid and self-care. However, the model indicated that neither of people´s (sex, socioeconomic class factor score, marital status, smoking, and inter-dialytic weight loss) had a significant association with their ESRD compliance behavior.

It was concluded that the age is the most predictor variable affecting patient's medications adherence. The top ranked relative importance index, were for attendance to dialysis sessions. Where compliance to medication had a very significant RII. The patient's perceived adherence to fluid restriction points out that HD patient experienced some difficulty with fluid restrictions and that the condition related socioeconomic factors may contribute to the nonadherence to diet and fluid restrictions.