



CORRELATION BETWEEN QUALITY OF LIFE AND ADHERENCE TO TREATMENT IN HEMODIALYSIS PATIENTS

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INTRODUCTION

Chronic kidney disease (CKD) is a multi-symptom syndrome that develops in consequence of progressive and irreversible damage to all renal structures, namely the excretory, metabolic, and secretory systems.

Renal replacement therapy is an option that forces patients to change their functioning and everyday life. Institutionalizing adherence to treatment in hemodialysis patients is one of the important nursing goals for improving the quality of life in these patients. In order to the health level and feeling of well-being hemodialysis, patients should adherence to the treatment.

OBJECTIVE OF THE STUDY:

This study aimed at determining the quality of life in hemodialysis patients presenting to hemodialysis in DaVita Clinic Dialysis Station, Piła, Poland, on the basis of adherence to treatment.

MATERIAL AND METHODS:

The study was conducted on a group of 71 patients hemodialysis in DaVita Clinic Dialysis Station in Piła. Diagnosed chronic kidney disease treated with hemodialysis and informed consent for the participation in the study were the criteria for the participation in the study.

The research was conducted in accordance with the Declaration of Helsinki after receiving a positive opinion of the Bioethical Commission of Pomeranian Medical University in Szczecin. Each respondent was informed about the aim of the study and the use of the results for research purposes. Participation was anonymous and voluntary.

The research instruments were: the 36-Item Short Form Health Survey (SF-36), the Adherence to Refills and Medications Scale (ARMS), and the author's questionnaire.

RESULTS

Our findings showed that 50.7% of the patients were male. Most of the respondents of the study (57%) were married, had a vocational education (38%) and had already retired (55%). The majority was diagnosed with chronic renal failure by their general physician (33.8%) followed by others who were incidentally diagnosed during a stay in a hospital (32.4%). Analysis of information regarding coexisting diseases showed that 59.2% of patients also suffers from arterial hypertension, 57.75% from diabetes and 39.44% from cardiovascular diseases.

The mean total score of adherence to treatment (ARMS questionnaire) as **17.8 ±4.1**. Data analysis regarding the quality of life among hemodialysis patients indicated that respondents had the best quality of life in domains such as: sense of mental health (MH), bodily pain (BP) and mental component summary (MCS). On the other hand, the results were the worst in case of physical functioning (PF), general health perception (GH) and physical role functioning (RP). Additionally, it has been noted that the patients function better in terms of mental (MCS) than physical component summary (PCS).

Based on the survey results it has been concluded that **age** correlates in a statistically significant way with the quality of life across all the domains ($p < 0.05$) except for bodily pain (BP) and general health perception (GH). It means that the higher the age the lower the quality of life in terms of pain and general perception of health. The analysis showed a statistically relevant correlation ($p < 0.05$) between **place of residence** and physical role functioning (RP), general health perception (GH), vitality (VT) emotional role functioning (RE), physical component summary (PCS) and mental component summary (MCS). Meaning, that the quality of life is better among residents of cities in comparison with rural population. Other domains did not demonstrate statistically relevant differences. The study has examined the influence of **level of education** on the quality of life. Statistically significant differences have been observed in terms of physical functioning (PF) and health transition (HT) ($p < 0.05$). The correlation coefficient in this study revealed a significant correlation between total score of quality of life and adherence to treatment ($P < 0,05$).

QUALITY OF LIFE	Correlation with ARMS		Correlation with age	
	Correlation factor	p *	Correlation factor	p *
PF- Physical functioning	-0.244	0.042	-0.395	0.001
RP- Physical role functioning	-0.141	0.243	-0.279	0.021
BP- Bodily pain	-0.024	0.84	-0.166	0.174
GH- General health perception	-0.152	0.205	-0.18	0.14
VT- Vitality	-0.284	0.016	-0.311	0.009
SF- Social functioning	-0.308	0.009	-0.255	0.035
RE- Emotional role functioning	-0.238	0.048	-0.326	0.007
MH- Mental health	-0.199	0.102	-0.377	0.002
HT- Health transition	0	0.999	-0.257	0.033
PCS- Physical component summary	-0.178	0.143	-0.339	0.005
MCS- Mental component summary	-0.293	0.015	-0.412	0.001

P = Normal distribution of correlated variables, Pearson correlation coefficient; p – statistical significance rate

CONCLUSION

- Adherence to therapeutic recommendations positively influences quality of life of hemodialysis patients therefore healthcare providers can promote the life quality of these patients via focusing on planning programs for emphasizing the role of education and interventions that improve adherence to treatment in these patients.
- Hemodialysis as a treatment method in CKD significantly contributes to decreased quality of life of treated patients, especially when it comes to the rural population, people with primary or vocational education.
- Age of patients treated with renal replacement therapy is a significant variable which worsens quality of life.

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