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Acute and Chronic Renal Failure, Psychological Support of Hemostatic Patients. Attitudes and Experiences of Nurses Working in Artificial Kidney Units

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Abstract:
Chronic renal failure is one of those chronic diseases that, due to the persistence of the disease and the long-term treatment process, has various effects on the physiological, psychological, functional capacity, lifestyle changes and independence status of the patient and his/her family. The aim of this study is to explore nurses' attitudes and perceptions of psychological distress and psychological support for hemostatic patients.

To this end, a quantitative questionnaire survey was conducted among nurses in a large Greek provincial hospital. According to the results of the survey, the psychological burden of hemostatic patients is particularly high, confirming previous data. The most important finding of the present study is that when patients do not receive, or at least feel that they do not receive, psychological support from their close family circle, this has a negative impact on the patient's cooperation during treatment.

Keywords: Renal Failure, Patients, Psychological Support, Nurses

1. Introduction

1.1 General remarks

Chronic renal failure is a deteriorating and irreversible condition of kidney function in which the body loses its ability to maintain electrolyte and metabolic balance, leading to increased levels of urea in the blood and its retention in the body. Dialysis is a method of removing unnecessary fluids and waste products when the kidneys are unable to do their job due to damage. Advances in knowledge and treatment technologies, as well as increased life expectancy, have increased the longevity of many patients with chronic renal failure.

Chronic renal failure is one of the chronic diseases that, due to the persistence of the disease and the long-term treatment process, has various effects on the physiological, psychological, functional capacity, lifestyle changes and independence status of the patient and his or her family. In the long term, it also causes a decline in the standard of living, physical and psychological problems, and limitations in recreational, social and work activities [21].

The psychological burden of patients with renal failure is a social issue, but it is also an issue related to the patient's quality of life, the effect of their treatment and their social environment.

1.2 Background

1.2.1 Quality of life for people with renal failure

The lives of people with chronic renal failure are reorganised and adapted to the changes brought about by the nature of the disease and its treatment. In addition, patients become dependent on the dialysis machine and medical staff [16,27]. Treatment also includes restrictions on diet and physical activity [6,22,27].

In turn, the intensity of mental and physical symptoms has a major impact on patients' perceived quality of life (QoL). The onset of negative symptoms of dialysis treatment (such as pain, sleep disturbance, depression, impairment of blood pressure variability and abdominal pain) or limitations resulting from the disease significantly reduce the level of Quality of Life (QoL) and lead to the disease being perceived as a burden. It also changes the patient's professional activity, which aggravates their financial situation. Patients with chronic renal failure also give up other activities such as sports, hobbies, social activities and personal development [19].

The quality of life of patients with chronic renal failure is influenced by social and family relationships. Not only family, but also good social relationships are important and a source of positive emotions and self-esteem and improve quality of life. On the other hand, lack of support and acceptance from family and friends has a negative impact on patients' health level through lower self-esteem and feelings of hopelessness and despair, leading to low mood, depression, resignation and a sense of a lower importance of life [8,10].

Therefore, improving mental health status may contribute to improving quality of life in this population segment. Assessing the quality of life of ESRD patients undergoing maintenance dialysis can help clinicians to understand the overall status of patients; therefore, it can guide the allocation of specific, context-sensitive and appropriate interventions to promote quality of life in this population, which could prevent the progression of psychological problems and ultimately improve quality of life [24].

1.2.2 Mental health in dialysis patients

Maintenance dialysis is one of the main treatments for tackling end-stage renal disease (ESRD) and has contributed to prolonging patients' lives [18]. Due to the gradual increase in chronic renal disease, the number of patients requiring dialysis is annually increasing. However, dialysis is a time-consuming process and can cause psychological distress despite good physical health [15]. Previous studies have shown that psychological problems, particularly depression, are common among patients with end-stage renal disease undergoing maintenance dialysis [29].

A high incidence of depression has been reported in ESRD patients on dialysis [14], which is associated with a significantly increased risk of morbidity and mortality [13]. Psychological problems affect the progression and outcome of patients with chronic renal disease [9], a problem that is more pronounced in ESRD patients on maintenance dialysis [12].

Psychological problems are one of the most common health problems affecting the survival of patients undergoing maintenance dialysis [12].

Patients undergoing dialysis experience a wide range of stressors that affect their daily lives, including loss of precious personal time during dialysis sessions, uncertainty about the future course of the disease, loss of previous family and professional roles, long waits for transplantation, and ultimately dependence on both machines and healthcare professionals [20]. Several studies have reported that dialysis patients experience an unusual psychological state that can lead to severe depression [23,.26].

In recent decades, there has been an increasing interest in understanding the needs of dialysis patients. Healthcare professionals, especially nurses who are close to patients and spend time caring for them, are able to develop a needs-based approach that allows patients to express themselves [4].

According to many studies, family is the most important and main source of support for patients and the highest level of social support is received from the family [2, 11, 31]. In the study by Shahgholian and Yousefi (2015), all the participants (except two) lived with and were supported by their families, but they felt that they were in need of additional support. The results of Juergensen et al.'s (2006) study also showed in this case that patients who were living with and supported by their families felt that this support was insufficient.

Therefore, one of the critical issues in implementing an effective holistic treatment for patients on dialysis is to increase family involvement in the treatment process. Considering the patient's family as an integral part of the multidisciplinary team of health professionals appears to be one of the most effective ways to improve treatment adherence [30].

Patient survival and better disease outcomes require support from family members and a safe and stable environment for patients. It is equally important to educate healthcare professionals in a needs-based approach, with the ultimate goal of long-term treatment success and patient adaptation to the disease [1].

1.2.3 Psychological burden of caregivers of patients with renal failure

The demand for healthcare, especially in the management of dialysis, has a profound and pervasive effect on family and friends, affecting the physical, social and emotional well-being of the patient's caregivers [25].

Caregivers are the individuals who are most involved in caring for and helping the patient during the course of the disease, in order to adapt and manage the patient. Family members of patients with chronic renal failure must perform supportive and caregiving functions at home or in outpatient settings, such as hospital dialysis units. This can affect their mental health to varying degrees [5].

Frequent hospitalisation of patients and disease-related factors can lead to deteriorating depression and reduced quality of life for carergivers. Caregivers experience stress from the additional responsibilities of managing patients' medical treatments, dietary needs, clinic appointments, and psychosocial issues [3]. Carergivers experience depression, anxiety, fatigue, social isolation, relationship strain and financial pressure. Carergiver burden is a general term used to describe the physical, emotional and financial costs of caring. Caregiver burden is defined as persistent difficulties, stress or negative experiences resulting from caregiving [7].

2. Presentation Of A Survey

The aim of the conducted survey was to analyse nurses' views on the psychological distress of dialysis patients. More specifically, this study analysed the attitudes and opinions of nurses working in renal units, especially in large provincial hospitals, about the level of psychological distress of dialysis patients and the level of psychological support they receive from their environment. In addition, this study analysed whether these nurses' views were associated with certain demographic characteristics.

2.1 Research materials and methodology

2.1.1 Sample

Quantitative research was conducted in the context of this study using a closed-ended questionnaire. The questionnaire was distributed and completed by nurses working in the renal unit of a large provincial hospital in Greece. Seventy (70) nurses participated in the survey and answered questions about the psychological distress of hemostatic patients and the need for and availability of psychological support from the patient's family and nurses. The sample consisted of males and females of all ages, all levels of education and various years of experience. The purpose of the study was to analyse nurses' views on the above issues (see Table 1).

Table 1

Demographic characteristic	Frequency	Relative Frequency (%)
GENDER		
Male	19	27.1
Female	51	72.9
AGE GROUP		
18 – 25	3	4.3
26 – 35	20	28.6
36 – 45	25	35.7
46 – 55	11	15.7
56 – 65	11	15.7
LEVEL OF EDUCATION		
Secondary education	11	15.7
Post-Secondary education (VET/ College)	12	17.1
Technological Educational Institute	34	48.6
University Degree	7	10.0
Post Graduate degree	6	8.6
PROFESSIONAL EXPERIENCE		
0 – 5 years	13	18.6
6 – 10 years	18	25.7
11 – 15 years	22	31.4
>15 years	17	24.3
MARITAL STATUS		
Unmarried	15	21.4

Married	43	61.4
Divorced	9	12.9
Widowed	3	4.3
NUMBER OF CHILDREN		
0	22	31.4
1	14	20.0
2	26	37.1
3	7	10.0
4	1	1.4
FAMILY MONTHLY INCOME		
<=1.000€	10	14.3
1.001 – 1.500 €	35	50.0
1.501 – 2.000 €	25	35.7
NIGHTSHIFTS		
< 2 / month	27	38.6
2 - 4 / month	36	51.4
> 4 / month	7	10.0

2.1.2 Measurement tool

After formulating the purpose of this study, the questionnaire was designed, choosing to include closed-ended questions as it was preferred to conduct quantitative research in order to obtain quantified results. The questionnaire was divided into two main parts and is presented in the appendix. The first part contains questions about the demographic characteristics of the participants. The second part contains questions about the participants' views on the level of psychological distress of patients and the existence and necessity of psychological support for patients from their relatives and nurses. In the part related to analysing the level of psychological distress of patients, the questions were based on the Hayes et al. (1997) Kidney Disease Quality of Life Short Form (KDQOL-SF) questionnaire. For the part investigating the presence and need of psychological support for patients, the questions were based on the Multidimensional Scale of Perceived Social Support by Zimet et al. (1988).

A pilot survey was then carried out on 10 nurses to assess whether the questions were clearly formulated or if some needed revision, but no such issue was raised. The questionnaire was then distributed to 91 nurses working in the renal unit of this hospital and a total of 70 completed questionnaires were collected.

2.1.3 Statistical analysis

The responses to the questionnaire were then recorded into an Excel for Windows file and then exported to IBM SPSS 24 statistical programme, to carry out the statistical processing of the data.

3. Results - Discussion

3.1 Descriptive statistical analysis

According to the survey results, there is a general consensus among the participants that renal failure causes many problems in the lives of patients and that patients are forced to spend a lot of time dealing with the disease (see Table 2).

Table 2

Renal failure causes a lot of problems in the patients' lives

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neither agree nor disagree	1	1.4	1.4	1.4
	Agree	38	54.3	54.3	55.7
	Fully agree	31	44.3	44.3	100.0
	Total	70	100.0	100.0	

There is also general agreement about the negative emotions patients experience in relation to their illness, including anger, feeling of being a burden to their family, insecurity about the future, frequent emotional breakdowns, constant worry about illness symptoms, social isolation and difficulties in social and personal relationships (see Table 3).

Table 3
Patients are usually socially isolated

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely disagree	3	4.3	4.3	4.3
	Disagree	7	10.0	10.0	14.3
	Neither agree nor disagree	14	20.0	20.0	34.3
	Agree	30	42.9	42.9	77.1
	Fully agree	15	21.4	21.4	98.6
	Don´t know/ Don´t answer	1	1.4	1.4	100.0
	Total	70	100.0	100.0	

Participants also almost universally agree that patients have an unsatisfactory quality of sleep and an unsatisfactory quality of life (see Table 4).

Table 4
Patients have a satisfactory quality of life

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely disagree	15	21.4	21.4	21.4
	Disagree	30	42.9	42.9	64.3
	Neither agree nor disagree	10	14.3	14.3	78.6
	Agree	10	14.3	14.3	92.9
	Fully agree	5	7.1	7.1	100.0
	Total	70	100.0	100.0	

Regarding the psychological support that hemostatic patients receive, the results of this survey show a clear trend of consensus among participants that patients do not have friends who try to help them (see Table 5), that they do not feel they can talk about their problems with their own people, and that they do not feel they receive adequate emotional support from their family (see Tables 6 & 7).

Table 5
Patients have friends who try to help them

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely disagree	11	15.7	15.7	15.7
	Disagree	21	30.0	30.0	45.7
	Neither agree nor disagree	18	25.7	25.7	71.4
	Agree	6	8.6	8.6	80.0
	Fully agree	5	7.1	7.1	87.1
	Don´t know/ Don´t answer	9	12.9	12.9	100.0
	Total	70	100.0	100.0	

Table 6

Patients feel that they receive appropriate emotional support from their family

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely disagree	12	17.1	17.1	17.1
	Disagree	17	24.3	24.3	41.4
	Neither agree nor disagree	19	27.1	27.1	68.6
	Agree	9	12.9	12.9	81.4
	Fully agree	6	8.6	8.6	90.0
	Don´t know/ Don´t answer	7	10.0	10.0	100.0
	Total	70	100.0	100.0	

Table 7

Patients often complain about the lack of psychological support from their own people

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely disagree	4	5.7	5.7	5.7
	Disagree	5	7.1	7.1	12.9
	Neither agree nor disagree	10	14.3	14.3	27.1
	Agree	28	40.0	40.0	67.1
	Fully agree	18	25.7	25.7	92.9
	Don´t know/ Don´t answer	5	7.1	7.1	100.0
	Total	70	100.0	100.0	

In fact, the majority of participants agree that patients do not feel valued in their own people's lives and often complain about the lack of psychological support from their own people (see Tables 8 & 9).

Table 8

Patients feel that they are a burden to their family

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	4	5.7	5.7	5.7
	Neither agree nor disagree	15	21.4	21.4	27.1
	Agree	21	30.0	30.0	57.1
	Fully agree	25	35.7	35.7	92.9
	Don´t know/ Don´t answer	5	7.1	7.1	100.0
	Total	70	100.0	100.0	

Table 9

Patients feel that they are valuable to the lives of their own people

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely disagree	12	17.1	17.1	17.1
	Disagree	21	30.0	30.0	47.1
	Neither agree nor disagree	20	28.6	28.6	75.7
	Agree	5	7.1	7.1	82.9
	Fully agree	11	15.7	15.7	98.6
	Don´t know/ Don´t answer	1	1.4	1.4	100.0
	Total	70	100.0	100.0	

In addition, the majority of participants observed that patients were uncooperative during their treatment (see Table 10) and felt that psychological support was a critical issue in patient treatment (see Table 11).

Table 10
Patients are cooperative during treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely disagree	15	21.4	21.4	21.4
	Disagree	28	40.0	40.0	61.4
	Neither agree nor disagree	19	27.1	27.1	88.6
	Agree	1	1.4	1.4	90.0
	Fully agree	7	10.0	10.0	100.0
	Total	70	100.0	100.0	

Table 11
Psychological support is a critical issue in the treatment of the patient

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely disagree	3	4.3	4.3	4.3
	Agree	29	41.4	41.4	45.7
	Fully agree	37	52.9	52.9	98.6
	Don´t know/ Don´t answer	1	1.4	1.4	100.0
	Total	70	100.0	100.0	

Regarding the psychological and emotional support that nurses can provide to patients with renal failure, the majority of participants did not seem to agree that providing emotional support to patients with renal failure is a waste of time (see Table 12) and in fact most of them are willing and not afraid to provide emotional support to patients, although it is something that makes them anxious as a thought (see Tables 13 & 14).

Table 12
Providing emotional support to people with renal failure is a waste of time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely disagree	29	41.4	41.4	41.4
	Disagree	25	35.7	35.7	77.1
	Neither agree nor disagree	10	14.3	14.3	91.4
	Fully agree	6	8.6	8.6	100.0
	Total	70	100.0	100.0	

Table 13

I am willing to provide emotional support to patients

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely disagree	4	5.7	5.7	5.7
	Disagree	1	1.4	1.4	7.1
	Neither agree nor disagree	2	2.9	2.9	10.0
	Agree	37	52.9	52.9	62.9
	Fully agree	26	37.1	37.1	100.0
	Total	70	100.0	100.0	

Table 14
I'm afraid to provide emotional support to patients

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely disagree	19	27.1	27.1	27.1
	Disagree	32	45.7	45.7	72.9
	Neither agree nor disagree	14	20.0	20.0	92.9
	Agree	1	1.4	1.4	94.3
	Fully agree	4	5.7	5.7	100.0
	Total	70	100.0	100.0	

The majority of respondents agree that psychological support is important for patients and that it is provided on the day-care facility (see Tables 15 and 16), that nurses have a good knowledge of how to deal with patients' psychological problems and that they have a good understanding of counselling patients (see Table 17).

Table 15
I think it is better for patients not to receive any psychological support

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely disagree	32	45.7	45.7	45.7
	Disagree	34	48.6	48.6	94.3
	Neither agree nor disagree	2	2.9	2.9	97.1
	Agree	2	2.9	2.9	100.0
	Total	70	100.0	100.0	

Table 16
No psychological support is provided in the daycare facility

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely disagree	24	34.3	34.3	34.3
	Disagree	38	54.3	54.3	88.6
	Neither agree nor disagree	2	2.9	2.9	91.4
	Agree	1	1.4	1.4	92.9
	Fully agree	5	7.1	7.1	100.0
	Total	70	100.0	100.0	

Table 17
Nurses have good knowledge of managing patients' mental health problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Absolutely disagree	1	1.4	1.4	1.4
	Disagree	7	10.0	10.0	11.4
	Neither agree nor disagree	13	18.6	18.6	30.0
	Agree	30	42.9	42.9	72.9
	Fully agree	19	27.1	27.1	100.0
	Total	70	100.0	100.0	

3.2 Inferential Statistical Analysis

In relation to the purpose of this research, an inferential statistical analysis was also carried out to determine if there were any demographic factors that were related to the views of the participants. Specifically, it was analysed whether experience was related to nurses' views on patients' psychological distress and psychological support and found to be statistically significant. It was also tested whether gender was related to nurses' views. From the tests carried out, no significant differences were found between the views of the two genders, except for individual viewpoints which did not seem to affect the overall picture. Similarly, the level of education was not found to have a statistically significant effect on nurses' views, neither on the psychological distress of patients nor on the need, importance and availability of psychological support.

However, the researchers emphasise and present the results of an analysis into whether patients' willingness to cooperate during their treatment is related to the psychological support they receive from their own people. To analyse this question, a chi-square test was performed among the variables "Patients are cooperative during their treatment" and "Patients often complain about the lack of psychological support from their own people". The results of the test are presented in the tables 18 and 19.

Table 18

Patients are cooperative during their treatment * Patients often complain about the lack of psychological support from their own people - Crosstabulation

Crosstabulation of Chi-Square test		Patients often complain about the lack of psychological support from their own people						Total
		Absolutely disagree	Disagree	Neither agree nor disagree	Agree	Fully agree	Don´t know/ Don´t answer	
Patients are cooperative during their treatment	Absolutely disagree	1	0	0	9	5	0	15
	Disagree	0	1	0	18	8	1	28
	Neither agree nor disagree	3	2	7	1	2	4	19
	Agree	0	0	1	0	0	0	1
	Fully agree	0	2	2	0	3	0	7
Total		4	5	10	28	18	5	70

Table 19

Results of Chi-Square test	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	55.995	20	.000
Likelihood Ratio	63.401	20	.000
Linear-by-Linear Association	3.380	1	.066
N of Valid Cases	70		

Based on the results of the chi-square test as shown in Table 19, it can be seen that patients' willingness of cooperation during their illness is statistically significantly related to the sense of psychological support they receive from their family. In fact, Table 18 shows that patients who frequently complain about the lack of psychological support from their own people are more likely to be uncooperative during their treatment. On the other hand, patients who do not often complain about the lack of psychological support from their family are more likely to be cooperative during treatment.

4. Conclusion

The psychological burden of hemostatic patients is high. The psychological support that these patients receive from their family environment is not always sufficient and sometimes non-existent. However, psychological support is necessary for these patients, both to ensure a better quality of life and for their cooperation during their treatment.

Patients who often complain about the lack of psychological support from their own people are more likely to be uncooperative during their treatment, whereas patients who do not often complain about the lack of psychological support from their own people are more likely to be cooperative during their treatment.

Based on the answers received from the nurses who participated in the survey, they seem willing to take on the role of psychological support or to contribute to it. However, as the psychological burden on daycare providers is also high, nurses who have taken on this role should be provided with appropriate resources and benefits to enable them to fulfil this role at the lowest possible cost.

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