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MEANING IN LIFE AND SOURCES OF MEANING, DEPRESSION AND QUALITY OF LIFE IN PATIENTS ON HEMODIALYSIS

CAMELIA SOPONARU[*], DIANA MURARU[**], MAGDALENA IORGA[***]

ABSTRACT. Meaning in Life and Sources of Meaning, Depression and Quality of Life in Patients on Haemodialysis. *Objectives:* The study aims to emphasize the connections between meaning in life, sources of meaning profiles, depression and quality of life in patients on haemodialysis (HD), as well as the hierarchy of sources of meaning in life of HD patients. *Material and methods:* The research was conducted on 70 HD patients (M = 54.55 ± 11.70). The instruments used were the Meaning in Life Questionnaire, Sources of Meaning Profile-Revised, Short Form 36 Health Survey Questionnaire and Beck's Depression Inventory. The data were processed using SPSS 17.00. *Results:* Negative correlations were identified between depression and the following variables: quality of life (r = - 0.490, p < 0,001), physical health (r = - 0.373, p = 0.001) and mental health (r = - 0.531, p < 0.001); collectivism (r = - 0.296, p = 0.013). A positive correlation was identified between individualism and physical health (r = 0.337, p = 0.004). Satisfying one's daily needs, engaging in personal relationships and one's relationship with nature are the most representative sources of meaning in life of HD patients. The results emphasize that HD patients with a high level of depression have significantly lower quality of life (p = 0.009) compared to patients with low and moderate values of depression. *Conclusion:* The results of this research highlight the fact that low scores of depression increase quality of life in HD patients, while meaning in life, gender and the environment are not influential. Although specific to the subjects who were part of the research lot, the results obtained can enrich scientific literature and trace future research directions.

Keywords**:** *meaning in life, haemodialysis, patient, quality of life, depression, coping behaviour*

Introduction

As defined by the WHO, quality of life is a multidimensional concept, covering dimensions like physical, psychological and social well-being (WHO). Quality of life in patients on haemodialysis was investigated especially from the point of view of

[*] *University Alexandru Ioan Cuza of Iasi, Faculty of Psychology and Educational Sciences, puzdriac@yahoo.com*
[**] *University Alexandru Ioan Cuza of Iasi*
[***] *University of Medicine and Pharmacy "Grigore T. Popa", Department for Behavioural Sciences, Iasi (Corresponding Author), magdaiorga@yahoo.com*

factors related to physical health. It was proved that the quality of physical life is strongly influenced by psychological aspects, but also by the social support received by the patient from the ones around.

A unanimously accepted definition for the concept of quality of life is difficult to achieve, as this concept covers multiple dimensions, starting from the state of physical well-being and going through cognitive skills, establishing satisfactory interpersonal relationships and having enough financial resources to explore the world beyond what is necessary to secure biological survival. When we consider health, quality of life refers to the perception of the effect of a disease and/or its treatment on personal health. Thus, quality of life includes the physical, psychological and social dimension, as assessed by the patient.

It is a proved fact that quality of life is correlated with factors related to the HD patient's mental health (such as depression and anxiety) and with other variables such as marital status, number of children, level of education, relationships with medical staff, adherence to treatment or to medical imposed restrictions (Vasilopoulou et al., 2016; Ng et al., 2015). Sociodemographic factors such as gender (female), age (older patients), job (unemployed) and a high number of hospitalizations, and psychological factors like anxiety, depression and comorbidities should be treated as predictors for quality of life. Psychosocial therapies should be oriented to these potentially modifiable factors, in order to improve QOL in some HD patients (Vazquez et al., 2003).

Depression was identified as the most frequent psychiatric disorder among patients suffering from end-stage chronic kidney disease (Kimmel & Peterson, 2006; Mie Rye Suk et al., 2002; Sun et al., 2008).

The effectiveness of haemodialysis should not be measured only by physical parameters (the rate of survival, satisfaction regarding one's physical state, independence or the number of comorbidities). An additional objective must take into account psychological, social, emotional or spiritual dimensions, which represent predictor of well-being.

Spiritual and religious aspects were identified as closely connected with the level of psychological distress – linked to fewer depressive symptoms and better quality of life and serving as a source of strength (Ramirez et al., 2012; Lucchetti et al., 2012). Spirituality refers to an attempt to understand the meaning and purpose of life; it does not refer to the organized practice of religion. The correlation between spirituality and health was proved by numerous studies aiming to design strategies to help HD patients cope with stress (Finkelstein et al., 2007). In many cases, the spiritual factor becomes crucial for the patient's adaptation to the stress caused by the disease. Very few studies considered researches on mechanisms for coping with stress related to the sources of meaning in life or of spirituality in the case of HD patients (Tanyi &Werner, 2003; Tanyi et al., 2006).

Frank considers that meaning in life is a vital element, giving coherence to a person's worldview and an important factor for one's quality of life and well-being. If one does not strive to find meaning in life, then eventually that person will lose the necessary well-being and psychological comfort (Frank, 1967, 1969). The absence of meaning in life causes a situation called “existential vacuum”. This state can manifest itself by symptoms of depression or aggressive behaviour.

The objectives of research are the following:

1. Identifying the connections between meaning in life, sources of meaning profiles, depression and quality of life in patients on haemodialysis.
2. Studying the effect of depression on quality of life, as well as on meaning in life.
3. Ranking sources of meaning by their presence, during the evaluation, in the life of HD patients.

Material and Methods

A number of 70 patients participated in this study; 38.6% of them were men and 61.4% were women, with a mean age of 54.55 ±.11.70 years. The selection criteria for including subject into this research were the following:

- the subjects were diagnosed with stage 5 chronic kidney disease and were on haemodialysis as a treatment;
- the subjects were at least 18 years old;
- the subjects had the cognitive skills needed to understand the meaning of the items used by the research instruments and to offer an answer according to their subjective experiences.

The research was conducted for 6 months (March – September 2014). Patients were informed about the protocol and signed the informed consent form. They had been previously informed regarding: the purpose of the research, how to fill in the questionnaires, confidentiality and data privacy, the possibility to withdraw from the study at any moment. The questionnaires were self-administered during HD sessions and the patients were assisted while filling in the tests (in case they had trouble understanding the meaning of certain sentences).

Four instruments were used:

1. The **Short Form 36** (SF-36) questionnaire is a generic instrument for measuring quality of life. It consists of 36 items. Its 8 scales contain items referring to the physical function, physical role, somatic pain, overall health, vitality, social

function, emotional role, mental health and two generic concepts aggregating the scales (physical health and mental health). The value of Cronbach's alpha coefficient for the 36 items was 0.82; for both the physical and mental health dimension, we obtained Cronbach's alpha coefficient 0.72.

2. The **Beck Depression Inventory** (BDI) is a self-assessment instrument consisting of 21 items, built to measure the severity of depression, Cronbach's alpha coefficient = .868.

3. The **Meaning in Life Questionnaire** (MIQ) has the purpose of assessing the presence and search for meaning in life, being an instrument made of 10 items, with scoring on a 7-step Likert scale. Cronbach's alpha coefficient = .758.

4. The **Sources of Meaning Profile-Revised** (SOMP-R) consists of 17 items which may be grouped in four sources of meaning profiles: self-transcendence (items 4, 7, 9, 10, 17), collectivism (items 8, 11, 12, 14), individualism (items 1, 3, 5, 6) and self-preoccupation (items 2, 13, 15, 16). Cronbach's alpha coefficient = .833.

The data collected included sociodemographic characteristics like age, gender, environment, marital status and educational level. The data were processed by SPSS 17.00 for Windows. To emphasize correlations we used the Pearson correlation and to identify the influence of certain variables we used the One-way ANOVA.

Results and Discussions

1. Descriptive analysis

Sociodemographic data

A number of 70 patients have been included in the study. 38.6% of these are men and 61.4% are women. The mean age is 54.55 ± 11.70 years (with a minimum of 19 years and a maximum of 76 years).

With respect to the inclusion in the haemodialysis program, the mean duration is 8 years and 3 months (with a minimum of 1 year and a maximum of 23 years).

A total of 49.2% of patients live in the countryside. By level of education, 14.3% are secondary school graduates, 14.3% are college graduates and 30% are university graduates.

A total of 14.3% of patients are single and 85.7% have a partner.

General scores

The general scores obtained by the lot of subjects for the 4 instruments applied are presented in Table 1.

Table 1. The results for SF-36, BDI, MIQ, SOMP-R

Instrument	General (M ± SD)	Women (M ± SD)	Men (M ± SD)
SF-36	90.70 ± 18.33	89.72 ± 17.07	92.25 ± 20.42
Physical health	90.70 ± 9.40	43.13 ± 9.04	43.62 ± 10.13
Mental health	43.32 ± 9.81	43.34 ± 8.96	45.48 ± 11.09
BDI	36.18 ± 9.37	36.44 ± 10.09	35.77 ± 8.27
MIQ	53.47 ± 9.10	52.95 ± 9.99	54.29 ± 7.56
Presence of meaning in life	27.85 ± 4.58	28.04 ± 4.94	27.55 ± 4.01
Searching for meaning in life	25.61 ± 6.59	24.90 ± 7.23	26.74 ± 5.36
SOMP-R			
self-transcendence	5.80 ± 0.84	5.98 ± 0.76	5.53 ± 0.91
collectivism	5.32 ± 1.25	5.24 ± 1.23	5.46 ± 1.29
individualism	5.20 ± 1.21	5.29 ± 1.04	5.06 ± 1.46
self-preoccupation	4.61 ± 1.05	4.55 ± 1.05	4.71 ± 1.07

The sources of meaning in life profile

In the hierarchy of sources of meaning profiles according to their presence in the life of HD patients, we found that the first place was taken by self-transcendence (M = 5.80 ± 0.84), followed by collectivism (M = 5.32 ± 1.25), individualism (M = 5.20 ± 1.21) and self-preoccupation (M = 4.61 ± 1.05).

Hierarchy of the sources of meaning in life

Calculating the mean and standard deviation for the 17 items of instrument Sources of Meaning Profile-Revised, we could achieve the hierarchy of the sources of meaning in life according to their presence in the life of the HD patients included in this research lot. The results obtained are presented in Table 2.

Table 2. Hierarchy of the sources of meaning in life

	Sources of meaning	M	DS
1.	Meeting basic, daily needs	6.27	0.96
2.	Engaging in personal relationships with family and/or friends	6.27	1.20
3.	Relationship with nature	6.20	1.12
4.	Offering help and support to others	6.17	1.07
5.	Ensuring financial security	5.74	1.45
6.	Awareness of personal achievements	5.72	1.39
7.	Promoting human values and ideals	5.44	1.56
8.	Promoting culture and tradition	5.44	1.57

	Sources of meaning	M	DS
9.	Involvement in personal development	5.42	1.62
10.	Interest in human rights	5.38	1.58
11.	Ensuring a legacy for the next generation	5.37	1.78
12.	Participating in recreational activities	5.15	1.76
13.	Interest in social causes	5.11	1.77
14.	Participating in religious activities	4.95	1.86
15.	Participating in creative activities	4.51	1.94
16.	Obtaining material possessions to secure a better life	4.15	2.01
17.	Participating in hedonistic activities (bets, parties)	2.28	1.76

Meeting basic, daily needs (M = 6.27 ± 0.96), engaging in personal relationships with family and/or friends (M = 6.27 ± 1.20) and one's relationship with nature (M = 6.20 ± 1.12) are the most representative sources of meaning in the life of HD patients, participating in hedonistic activities (M = 2.28 ± 1.76) ranking last.

2. Correlational analysis

The correlations between meaning in life, sources of meaning profiles, depression and quality of life in patients on haemodialysis emphasized statistically significant correlations. Positive correlations were identified between depression and physical health ($r = -0.373$, $p = 0.001$), mental health ($r = -0.531$, $p < 0.001$); negative correlations were identified between depression and quality of life ($r = -0.490$, $p < 0.001$), collectivism ($r = -0.296$, $p = 0.013$) and individualism ($r = -0.300$, $p = 0.012$). Positive correlations were also identified between individualism and physical health ($r = 0.337$, $p = 0.004$) and quality of life ($r = 0.302$, $p = 0.110$).

3. The influence of depression on quality of life and mental health

The patients have to follow all medical indications (diminished physical activity, food and liquid restrictions to maintain a comfortable bodyweight) and to avoid the adverse effects of comorbidities (diabetus mellitus). They cope with their psychological distress determined by the new lifestyle and include haemodialysis sessions in their weekly activities. The disease itself and its effects on the patient's personal, professional and social life also have effects at a psychological level. The many effects have been researched and depression has been identified as having

the highest frequency rates among the psychological problems of patients suffering from chronic kidney diseases and being treated by the haemodialysis procedure (Finkelstein & Finkelstein, 2000). A study of Lopes et al. (2002) which included chronic kidney disease patients from the USA and a few European countries found that the prevalence of depression was nearly 20%. The study also included the questioning of patients regarding self-reported depression; thus, a positive correlation was identified between the level of depression and the mortality rate, as well as the number of hospitalizations. Previous studies identified that the rate of depression among HD patients was as high as 15%, and for self-reported depression, this percentage went up to 30% - 50%. According to DSM diagnoses, the rates of major depression are considerably lower than 15% (Kimmel et al., 1996).

The results regarding the effects of depression on quality of life and mental health are presented in Table 3.

Table 3. The influence of depression on quality of life and mental health

Quality of life				**Multiple comparative analysis**		
depression	M	F (2. 69)	Sig	depression		Sig
low	93.227	5.059	**0.009**	Low major	16.30	**0.027**
moderate	94.228			Moderate major	17.305	**0.009**
major	76.923			Moderate Low	1.001	1.000
Mental health				Multiple comparative analysis		
depression	M	F (2. 69)	Sig	depression		Sig
Low	46.22	6.990	**0.002**	Low major	10.53	**0.004**
Moderate	46.02			Moderate Major	10.33	**0.002**
Major	35.69			Moderate Low	- 0.19	1.000

Most studies reported similar findings. Strong correlations between depression and poor quality of life were identified in different countries and in different decades. The rapid increase in the number of patients on haemodialysis, paralleled by the significant increase in the lifespan of these patients, has improved the possibility of monitoring patients on haemodialysis both from a medical and from a psychological perspective.

Our study has not identified influences of depression on physical health (p = 0.114) and on meaning in life (p = 0.105), which means that depression does not considerably affect physical aspects of life and does not determine considerable changes of meaning in life.

This study has some limitations. Firstly, the generalization of results is limited by the size of the lot, as well as by the characteristics of participants in the research. Secondly, the transversal nature of the study limits the results obtained only to the moment of the assessment. Thirdly, the intrusive nature of the items and the delicate subject could cause resonances at an emotional and cognitive level, possibly with significant implications for the results. Fourthly, the subjects' tendency to show a façade must be taken into account when it comes to subjects filling in questionnaires. Fifthly, the study was conducted on a small number of subjects; thus, the results cannot be generalized.

Conclusions

The study emphasizes the fact that patients on haemodialysis find meaning in life from sources included in the profile of those transcending the self. Significant connections have been highlighted between depression, quality of life, physical health and mental health. HD patients' quality of life and mental health are influenced by their level of depression. These data support the need to implement in practice intervention strategies aimed at reducing or even eliminating patients' depressive symptoms, the ultimate purpose being to improve HD patients' quality of life.

REFERENCES

FINKELSTEIN, F. O., WEST, W., GOBIN, J., FINKELSTEIN, S. H., & WUERTH, D. (2007). Spirituality, quality of life and the dialysis patient. *Nephrology Dialysis Transplantation*. 22(9). pp. 2432-2434.

FINKELSTEIN, F.O., FINKELSTEIN, S.H. (2000). Depression in chronic dialysis patients: Assessment and treatment. *Nephrology Dialysis Transplantation*. 15. pp. 1911–1913.

FRANKL, V. E. (1967). *Psychotherapy and existentialism: Selected papers on logotherapy*. New York: Simon & Shuster.

FRANKL, V. E. (1969). *The will to meaning: Principles and application of logotherapy*. New York: World Publishing.

KIMMEL, P. L., WEIHS, K., & PETERSON, R. A. (1993). Survival in haemodialysis patients: the role of depression. *Journal of the American Society of Nephrology*. 4(1). pp. 12-27.

LOPES, A. A., BRAGG, J., YOUNG, E., GOODKIN, D., MAPES, D., COMBE, C., PIERA, L., HELD, P., GILLESPIE, B., & Port, F. K. (2002). Depression as a predictor of mortality and hospitalization among haemodialysis patients in the United States and Europe. *Kidney international*. 62(1). pp. 199-207.

LUCCHETTI, G., ALMEIDA, L. G. C., & LUCCHETTI, A. L. G. (2012). Religiousness, mental health, and quality of life in Brazilian dialysis patients. *Hemodialysis International*. 16(1). pp. 89-94.

MI RYE SUH, R. N., HYUK JUNG, H., BAE KIM, S., SIK PARK, J., & SEOK YANG, W. (2002). Effects of regular exercise on anxiety, depression, and quality of life in maintenance haemodialysis patients. *Renal failure*. 24(3). pp. 337-345.

NG, H. J., TAN, W. J., MOOPPIL, N., NEWMAN, S., & GRIVA, K. (2015). Prevalence and patterns of depression and anxiety in haemodialysis patients: A 12-month prospective study on incident and prevalent populations. *British journal of health psychology*. 20(2). pp. 374-395.

RAMIREZ, S. P., MACÊDO, D. S., SALES, P. M. G., FIGUEIREDO, S. M., DAHER, E. F., ARAÚJO, S. M., PERGAMENT K.L., HYPHANTIS MT, & CARVALHO, A. F. (2012). The relationship between religious coping, psychological distress and quality of life in haemodialysis patients. *Journal of Psychosomatic Research*. 72(2). pp. 129-135.

SON, Y. J., CHOI, K. S., PARK, Y. R., BAE, J. S., & LEE, J. B. (2008). Depression, symptoms and the quality of life in patients on haemodialysis for end-stage renal disease. *American journal of nephrology*. 29(1). pp. 36-42.

TANYI, R. A., & WERNER, J. S. (2003). Adjustment, spirituality, and health in women on haemodialysis. *Clinical Nursing Research*. 12(3). pp. 229-245.

TANYI, R. A., WERNER, J. S., RECINE, A. C. G., & SPERSTAD, R. A. (2006). Perceptions of incorporating spirituality into their care: a phenomenological study of female patients on haemodialysis. *Nephrology Nursing Journal*. 33(5). pp. 532-538.

VASILOPOULOU, C., BOURTSI, E., GIAPLE, S., KOUTELEKOS, I., THEOFILOU, P., & POLIKANDRIOTI, M. (2016). The impact of anxiety and depression on the quality of life of haemodialysis patients. *Global journal of health science*. 8(1). pp. 45-55.

VAZQUEZ, I., VALDERRÁBANO, F., JOFRE, R., FORT, J., LÓPEZ-GÓMEZ, J. M., MORENO, F., DAMASO, S.G. & Spanish Cooperative Renal Patients Quality of Life Study Group. (2003). Psychosocial factors and quality of life in young haemodialysis patients with low comorbidity. *Journal of Nephrology*. 16(6). pp. 886-894.