

How patients with end-stage renal disease manage their condition

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Abstract

Purpose: The main research problem is to answer the following question: What ways of coping with situations of end-stage renal disease are used by the studied patients? To measure strategies of coping with stressful situations, The Ways of Coping Questionnaire (WCQ), devised by Folkman and Lazarus, was used.

Material and methods: As examined group, the men with end-stage renal disease (N=113), including patients with a transplanted kidney (N=54) and dialyzed patients (N=59), was chosen. The analysis of these situations shows that from the psychological point of view, they are, to a certain extent, different situations. In this connection, the following question appears: Is there a relationship between the ways of coping with disease and the applied methods of treatment: dialysis therapy and transplantation?

Results: Our findings shows that there are no perceptible, statistically essential differences in the applied strategies, evaluated by means of WCQ, between patients with a transplanted kidney and the ones dialyzed. Perhaps, despite the differences presented above in this argument, situations of patients with a transplanted kidney and the ones dialyzed are similar in some significant way, and this is reflected in the strategies they adopt. One of such common features for the situations of both groups of patients is a real, continuous threat of losing life. The situations studied are uncontrollable situations that can actually be influenced by nobody.

Conclusions: The results of research have been shown the lack of statistically essential differences in the applied

strategies, evaluated by means of WCQ, between patients with a transplanted kidney and the dialyzed ones.

Key words: end-stage renal disease, dialysis patients, transplanted kidney.

Introduction

The renal replacement therapy, i.e. peritoneal dialysis, hemodialysis or transplantation, enables people with end-stage renal disease to live. At the same time, however, it becomes a source of stress for them. In Polish literature, there is not much news about psychological problems of dialyzed patients and patients with transplanted kidneys. These issues are described in more detail in English medical and psychological literature, and especially by American scientists, one example of which are the works by the team of Simmons from The Department of Sociology at The University of Minnesota in Minneapolis [1-4].

Renal disease and replacing the work of kidneys with dialyses or their transplantation, as any chronic somatic disease, is a particular case of a difficult situation which overloads the mental control system. This situation entails changes in the functioning of emotional, motivational and cognitive spheres, both in the vital and functional aspects.

The dialyzed patients have to accept the permanent procedures for hours accompanied by a lot of unpleasantness and the painful injecting of dialysis needles a couple of times a week. They are aware of the peculiar dependence of their own health, or even life, on the proper functioning of medical equipment. Going on holiday or spending time away with the families becomes unfeasible. Patients cannot even count on a short break in the contact with a dialysis center, and they do not have an influence on the course of their disease. Neither can they change their situation, nor does it become difficult to maintain a relative balance of mind. The new way of life, imposed by

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treatment, causes fatigue of the unnatural situation, and, after some time, a revolt, a desire to stop the procedures, and even suicidal attempts or aggression towards the environment. The sick undergo periods of breakdowns, emotional disorders in the form of apathy, anxiety, lowered mood, despair, fear, low self-esteem. The reports by many scientists [5-11] show that dialyzed patients, while adapting to this difficult situation, apply various defense mechanisms, and the strong will to live makes them agree to such a form of treatment.

Psychological problems resulting from changes in the biological functioning of their organism occur also in patients after transplantation. These patients are aware of having to regularly take drugs, go for checkups at their transplantation clinic and strictly follow all of the doctor's recommendations. At the same time, patients after transplantation are aware of the possibility to return to dialyses in case of rejection. Needless to say, this makes them feel much safer. Dialysis therapy is treated by many patients as a transitory stage on the road to "normal", machineless life after transplantation. Actually, all patients wish to be operated on, although they are aware of possible complications during or after the procedure. It becomes necessary to make their expectations real as far as the possibility of successful transplantation and the quality of life after the procedure are concerned [12-14].

Due to their chronic condition, patients with end-stage renal disease are in a difficult, stressful situation. In own research, theoretical foundations of the interactive conception of stress and management by Lazarus and Folkman [15,16] were used. Stress is understood as a certain relation between a person and the environment and evaluated by the individual as burdening or exceeding their capabilities. The way of coping with stress depends on the evaluation of the situation carried out by the subject. In accordance with the interactive model, both situational and subjective factors are taken into account.

The subject of the research is an attempt to define ways of coping with situations accompanying end-stage renal disease. A person in a stressful situation perceives and interprets it as a threat, challenge, or loss. Depending on this evaluation, they choose certain coping strategies. Actually, strategies are dependent on the situation and hence the situational changeability of the coping process. The stressful situation itself, i.e. dialysis therapy and transplantation, may mean that people with end-stage renal disease choose the "coping" strategy. At the same time one should remember that, in accordance with Lazarus and Folkman's theory, psychological stress is not placed in the situation itself, or the person, although it is conditioned by both. It results from the relationship of the person with the situation as perceived by the subject.

Material and methods

The main research problem is to answer the following question: What ways of coping with situations of end-stage renal disease are used by the studied patients?

As it has been mentioned before, dialysis therapy and transplantation are methods of treatment which save life of patients suffering from end-stage renal disease. The analysis of these

situations shows that from the psychological point of view, they are, to a certain extent, different situations. In this connection, the following question appears: Is there a relationship between the ways of coping with disease and the applied methods of treatment – dialysis therapy and transplantation? The Ways of Coping Questionnaire (WCQ), devised by Folkman and Lazarus [17,19], was used to measure strategies of coping with stressful situations. Coping strategies are defined in this questionnaire on the basis of the studied person's opinion on 66 statements describing behavior related to a certain stressful situation. Eight scales of the questionnaire correspond with eight numerical results, on the basis of which the strategies of coping in a stressful situation used by the studied people are evaluated. The following strategies have been distinguished: confrontive coping, distancing, self-controlling, seeking social support, accepting responsibility, escape, avoidance, painful problem-solving, positive reappraisal. It should be emphasized that in accordance with Lazarus' theory, one studied person may use different ways of coping in the same situation. The questionnaire was used in Poland by the Team of The Institute of Clinical Psychology at The Medical Academy in Warsaw, and then by the Team directed by Professor Heszen-Niejodek from Silesian University [19].

Results

The examined group were men with end-stage renal disease (N=113). The patients included people with a transplanted kidney (N=54) – patients of The Transplantology Institute PSK (State Clinical Hospital) No. 1 in Warsaw, as well as dialyzed patients (N=59) – from randomly chosen Dialysis Centers, and namely: from Puławy, Warsaw, Wołomin, and Zamość. The studied men were 18 to 67 years old ($X=41.04$, $SD=12.32$). Most of them are married; among the dialyzed (N=43, 72.9%), after transplantation (N=37, 68.5%). Men with transplanted kidneys have secondary education (N=40, 74%), which is similar to the figures for the dialyzed men (N=41, 69.5%). Employment is another variable which characterizes the studied men, i.e. whether they work full- or part-time, carry out an order contract, or are unemployed. Among the patients with a transplanted kidney, over a half currently work N=29 (54%), 25 men are not employed (46.3%). Employment among dialyzed patients looks different. The overwhelming majority of men N=51 (86.4%) do not work, and only 8 of those examined are employed (13.6%), among whom 2 people work full-time, 4 people work part-time, and 2 people have an odd job carrying out order contracts. Such a large number of unemployed people among dialyzed patients is conditioned by situational factors – the complicated situation of dialysis therapy, outright being unable to reconcile the necessity of undergoing difficult, lasting a few hours procedures a couple of times a week with professional work. Also, information about the duration of a disease of the studied people was gathered. Transplantation patients live with a transplanted kidney, on average, from one year to ten years: about four years from performance of the procedure (N=54, $=3.98$, $SD=2.66$). It should be added that earlier, that is before transplantation, all patients had been subject to dialysis therapy for one to a few years. The studied dialyzed people

Table 1. Ways of coping with end-stage renal disease situations for questionnaire WCQ with people with a transplanted kidney (group I, N=54) and dialysis patients (group II, N=59)

Ways of coping	Group I		Group II		F	p
	\bar{X}	SD	\bar{X}	SD		
Confrontive coping	9.13	2.54	8.32	2.56	4.68	0.095
Distancing	9.26	2.67	9.44	2.71	-0.36	0.721
Self-controlling	11.29	2.51	11.85	2.05	-1.28	0.206
Seeking social support	10.20	2.87	10.88	2.34	-1.38	0.170
Accepting responsibility	6.28	2.09	5.66	2.29	1.49	0.140
Escape-avoidance	10.35	2.99	10.54	3.91	-0.29	0.773
Planful problem-solving	10.48	2.01	9.73	2.75	1.65	0.102
Positive reappraisal	12.41	3.08	11.76	3.04	1.12	0.265

had been subject to procedures for a few months to ten years. The average duration of applying dialyses among these people is over two and a half years ($N=59$, $=2.59$, $SD=1.71$). The groups differ as far as duration of the disease and treatment is concerned. The ways of coping with the disease applied by the studied patients were presented in *Tab. 1*.

The obtained results show a variety of applied ways of coping with the disease by the studied people. The *Tab. 1* shows that there are no perceptible, statistically essential differences in the applied strategies, evaluated by means of WCQ, between patients with a transplanted kidney and the ones dialyzed. Perhaps, despite the differences presented above in this argument, situations of patients with a transplanted kidney and the ones dialyzed are similar in some significant way, and this is reflected in the strategies they adopt. One of such common features for the situations of both groups of patients is a real, continuous threat of losing life. The situations studied are uncontrollable situations that can actually be influenced by nobody.

Discussion

In order to observe the situational conditioning of the ways of coping with the disease, the results of patients with a transplanted kidney were compared with the results of dialyzed patients (see *Tab. 1*). On the basis of the results obtained, it turned out that the situation of hemodialysis and transplantation does not significantly differentiate the ways of coping with the disease applied by the studied patients. A supposition emerges that there may be more similarities than differences in these situations, despite the clear medical division. A statement about uncontrollability of these situations seems justified. Both dialysis therapy and transplantation are unforeseeable – a patient does not know at all what to do to feel well during hemodialysis, or when their organism rejects the transplanted kidney, despite the information about these ways of treatment that they have. They are also unmodifiable situations, because in spite of applying various strategies in order to cope with the problems patients do not achieve desirable results, and the awareness of a threat of their lives is still present.

Research made on the ways of coping with the disease used by people with end-stage renal disease makes it possible to formulate some conclusions.

First of all, the interactive conception of stress by Lazarus and Folkman is a theoretical formulation which allows making research on psychological problems of the sick. In order to construct this research, it is essential to distinguish three notions: style, strategy and process of coping with the disease. The research presented concerns remedial strategies used by chronically ill patients. The results obtained show that patients undergoing hemodialysis and the ones after transplantation of a kidney use various strategies of coping with the disease. Small situational differences occurred in coping strategies, which may indicate methodological difficulties, as the technique applied might not have observed these differences to a proper extent. Attempts should be made to develop new techniques to study coping strategies for those groups of patients. The interactive theory of stress and coping shows it is necessary to examine three categories: strategy, style and process. Undoubtedly, the strategies used by the patients under examination are influenced by properties of a situation, but also the style, and hence the need to also study this individual disposition determining human behavior in stressful conditions. It should be emphasized that human behavior in a difficult situation is conditioned by the situation, but first of all by subjective evaluation of this situation. Other variables appear, such as: the ill person's own image of the disease, personality factors, social circumstances, which may make it difficult to empirically verify the coping strategies used by people.

Secondly, basing on the research made, remarks that could be applied in practice can be listed too. A human is a psychosomatic whole, and hence the necessity to get to know the situation and subjective conditioning which are important when choosing certain coping strategies. The disease situations studied are uncontrollable situations, which virtually cannot be influenced by anyone. A remark about decreasing the subjective feeling of uncontrollability of the disease situation emerges here. It becomes important to properly inform patients and their families and to present the areas of life where they can be active even when the disease represents a threat of life, as is the case with end-stage renal disease. In Poland, more and more people are treated with hemodialysis and kidney transplantation. Awareness of the society of the role of these methods of treatment is increasing as well. It is then necessary to continue research aiming to help rehabilitate people with end-stage renal disease.

Conclusions

In this paper the ways of coping with situations of end-stage renal disease used by the dialyzed and transplanted patients have been described by means of Folkman's and Lazarus's WCQ. The results of research have been shown the lack of statistically essential differences in the applied strategies, evaluated by means of WCQ, between patients with a transplanted kidney and the dialyzed ones. This conclusion can be followed from uncontrollable situations, which virtually cannot be influenced by anyone.

References

1. Simmons RG, Klein SD, Simmons RL. The gift of life: The social and psychological impact of organ transplantation. New York, John Wiley and Sons; 1977.
2. Simmons RG, Kamstra-Hennen L, Thompson CR. Psychosocial adjustment five to nine years posttransplant. *Transplant Proceedings*, 1981; 13: 40-5.
3. Simmons RG, Anderson PD, Kamstra BL. Comparison of quality of life of patients on continuous ambulatory peritoneal dialysis, hemodialysis, and after transplantation. *Am J Kidney Dis*, 1984; 3: 253-5.
4. Simmons RG, Abress L, Anderson CR. Quality of life after kidney transplantation. *Transplantation*, 1988; 45: 415-21.
5. Burton HJ, Kline S, Lindsay R, Heidenheim P. Role of support in influencing of end-stage renal disease. *General Hospital Psychiatry*, 1988; 10: 260-6.
6. Colombi A. Hemodializa. Warszawa, PZWL, 1980.
7. Hirsch D. Death from dialysis termination. *Nephrology, Dialysis, Transplantation*, 1989; 4: 41-4.
8. Kutner N, Brogan D. Expectations and psychological needs of elderly dialysis patients. *Inter J Aging and Hum Dev*, 1990; 31: 239-49.
9. Roberts J, Kjellstrand C. Choosing death. Withdrawal from chronic dialysis without medical reason. *Acta Med Scand*, 1988; 223: 181-6.
10. Witorzeń M. Aspekty psychiatryczne leczenia powtarzanymi dializami. *Psychiatria Polska*, 1992; 26: 111-3.
11. Witorzeń M. Obraz psychopatologiczny osób wykazujących reakcję rezygnacyjną w czasie leczenia dializami powtarzanymi. *Psychiatria Polska*, 1992; 26: 105-9.
12. Frey GM. Stressors in renal transplant recipients at six weeks after transplant. *ANNA J*, 1990; 17: 443-50.
13. Fukunishi J. Anxiety associated with kidney transplantation. *Psychopathology*, 1993; 26: 24-8.
14. White M, Ketefian S, Starr A, Voepel-Lewis T. Stress, coping, and quality of life in adult kidney transplant recipients. *ANNA J*, 1990; 17: 421-4.
15. Lazarus RS. Stress, appraisal and coping. New York, Springer, 1984.
16. Wrześniewski K, Style a strategie radzenia sobie ze stresem. [W:] Heszen-Niejodek, Ratajczak Z (red.). Człowiek w sytuacji stresu. Problemy teoretyczne i metodologiczne. Wyd US, Katowice, 1996.
17. Folkman S, Lazarus RS. The Ways of Coping Manual for Questionnaire. Consulting Psychologist Press, Paolo Alto, 1988.
18. Lazarus RS. Paradygmat stresu i radzenia sobie. *Nowiny Psychologiczne*, 1986; 3-4.
19. Simmons RG, Klein SD, Simmons RL. The gift of life: The social and psychological impact of organ transplantation. New York: John Wiley and Sons; 1977.