The Effect of Dignity Therapy on Hope Level in Patients with Chronic Renal Failure

Undergoing Hemodialysis

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Abstract: Diseases such as chronic renal failure, lead to the hope level decrement by impairing the patient's health and limiting the conditions. Hope level increment can change the patient's view of the life and illness. Dignity therapy is a unique and short therapeutic approach, designed to decrease suffering, enhance the quality of life and bolster a sense of dignity for patients who are suffering from life-threatening or life-limiting illnesses. This study examines the impact of dignity therapy on hope level in patients with chronic renal failure undergoing hemodialysis. This is a two-group experimental research with pre test - post test design, which was studied on selected hospitals of Mashhad. Seventy four patients with chronic renal failure, undergoing hemodialysis were involved in the study after obtaining informed consent. They were randomly assigned in two groups; 36 patients of even days were chosen as the intervention group and 34 patients of the odd days assumed to be the control group. In the intervention group, dignity therapy has been done in two 45-60 minutes sessions. The patient's words have been tape recorded, written, edited, and finally the "generativity document" created and has been shared with the patient's intimates. Hope level of patients studied before and 1month after the intervention by the Herth's hope index questionnaire and the collected data has been analyzed by SPSS software (Version 11.5); in which, Wilcoxon and Mann-Whitney test were applied in the analysis. Although, there was no significant differences in mean score of hope before the intervention between the two groups (p=0.832), one month after dignity therapy the mean score of hope for intervention group (34.1±2.6) and control group (32.4 ± 3.90) revealed a significant statistical differences (p=0.038). Also, comparing the mean score of hope in intervention group in the pre test (32.2±3.22), and post test (34.1±2.6), represented a significant statistical difference (p=0.000), while this change in control group was not significant (p=0.188). Dignity therapy increases the hope level in hemodialysis patients. Therefore, by planning and performing such interventions the hope level in chronic renal failure patients can be increased.

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INTRODUCTION

The chronic illnesses have considerable effects on the patients' lives and change their view of the life(1). One of these diseases is the chronic kidney disease (CKD), which needs dialysis(2). Today, the kidney diseases are of the major health problems in communities. In (CKD), the kidneys become unable to exert the products of metabolism and their regulating actions, therefore toxins remain in the body and the electrolyte and acid-base balance will become disrupted(3).

The CKD patients are faced with a debilitating and lifelong limiting condition. Moreover, they become dependent on multiple groups of caregivers to use a device, which controls their life and comfort (4).

Threatening situations and changes in the life, can affect the hope level in people(5), which limited physical activity, and physical defects will decrease the hope level (6).

Hope is an essential element in all of the life aspects and is necessary for a healthy life(5). Understanding the concept of the hope is important for the nurses and appears to be an important factor in the effectiveness of psychological interventions and coping with chronic illness (7). In various cultural and scientific views, hope has different definitions. Snyder says: hope is not a passive emotion that only emerges in the dark moments of the life, but it is a process of recognition, in which people specify their goals, create ways to achieve them and develop the motivation to implement these ways and continue this process. These three components of hope are known goals, pathways thinking, and agency thinking. (8)

Banson Ward (2006) in the review of studies about hope says high levels of hope are associated with physical and psychological health, self-worth, social network and positive thinking(9).

Snyder (2006) concluded in his research that there is a significant correlation between high levels of hope and positive emotions, and also between low levels of hope and negative emotions. Hence, low levels of hope predict depressive symptoms, that are independent of diagnosis symptoms and coping strategies(10).

Hope is an important factor in patient's care, which includes treatment, rehabilitation, and palliative care(11). According to this, hope level increment in patients with chronic renal failure can change their views of life and disease(12), and nurses by their presence, talking to the patient, giving information, polite and honest interacting, are able to affect the patients' hope level (13). Since there is always the possibility of neglecting emotional and social requirements during the process of meeting the physical needs of patients, the best way to reduce these individuals' demands are interventions, in which not only the physical treatment, but also psychological and social therapies are considered (6). One of these interventions is dignity therapy, which is one of the palliative care types and is considered as a psychotherapy, which is unique, personal and short-term, in order to enhance the quality of life, increase the hope and life expectancy, and creating a sense of purpose and well-being for people who are suffering from life-threatening and life- liming diseases(14).

According to the importance of psychological conditions and hope in hemodialysis patients, and the fact that dignity therapy is known as a way of improving psychological conditions in patients who are suffering from life-threatening disease; and also the fact that none of the researches were done on effectiveness of this method on hope level among hemodialysis patients in Iran and other countries, we decided to focus on this topic. The results of this study not only support these patients, but also help other researchers in this context.

MATERIAL AND METHODS

This is a two-group experimental research with pre test - post test design which was studied on selected hospitals of Mashhad city. Subjects were the patients who were undergoing hemodialysis and had been referred to dialysis centers in Imam reza, Hefdah shahrivar and Hasheminejad hospitals of Mashhad in 2012. Inclusion criteria were willing to participate in the research and completing the informed consent form, be aware of their disease, willing to have at least 6 months hemodialysis treatment, being in the 18-70 years old range, having the ability to reading and writing (in order to answer the questionnaire), having physical ability without cognitive impairment (according to Mini Mental Status Examination Score) to attending in the interviews and responding to the questionnaire, not having drug abuse, not having major psychiatric disorders (such as Schizophrenia, Paranoid disorder and major depression), not using effective psychiatric drugs, not travelling more than 4 weeks and not immigrating from Mashhad to other cities during the next one month.

The study received approval from the ethics committee of University of Medical Sciences in Mashhad. After taking informed consent, patients were allocated randomly in to two groups based on the days of the week. According to this, patients who admitted in dialysis centers on even days were

considered in the dignity therapy group and patients who arrived in the odd days were considered in the control group. In the intervention group after performing pre-test (assessment of hope level), dignity protocol questionnaire was given to the patient in order to think, after 24 to 48 hours, dignity psychotherapy sessions were conducted in 45 to 60 minutes. Besides the session sound recording and after transcribing, editing and creating a document, in the third session manuscripts read to the patient and the necessary changes were made with the patient's tendency. After that, the final generativity document was given to one of the patient's intimates who was determined by patient. One month later, the posttest (assessment of hope level) has been done.

In the control group, patients who arrived in the odd days and desired to enter into the study were listed. Among these, equal number of patients with even days patients were selected randomly. Pretest was done and post-tests were performed one month later. Sampling has been done in six months.

Data gathering tools for performing this study were checklist of selecting study samples, questionnaire of demographic characteristics of patients, Herth Hope index and Mini Mental Status Examination Score (MMSE).

Herth Hope index comprises 12 items and 3 dimensions (cognitive-temporal, affectivebehavioral and affinitive-contextual) that each of them are checked by 4 questions. Each item is graded based on a score from 1 (disagree), 2 (I'm not sure) and 3 (agree). But, the questions 3 and 6 are scored inversely. The score of HHI is between 12 and 36, and higher total scores indicate higher levels of hope.

Herth hope index has been translated into Persian by Abdi et al., (2007) and its validity has been confirmed(15). The brief mental condition questionnaire (MMSE) was used in the study of Foroghan et al., (2006) and the reported criterion validity was 78%(16). Also, reliability of Herth hope index has been confirmed by test-retest in patients with cancer with correlation of 84% and in kidney transplant patients was reported 78%(6).

Data was analyzed by SPSS (Version 11.5). Kolmogrov smirnov and Shapiro Wilk tests were used to evaluate the normal distribution of variables. In addition, Wilcoxon and MannWhitney tests were used to examine the research objectives.

Results

The mean age of subjects in this study was 49.0 ± 12.8 years (20-70 years). The most of patient were married 44.6% and had primary education 81.1%. Duration of hemodialysis was 6.5 ± 7.4 years (0.5-26 years). All participants were living in Mashhad, they were Muslims and 69.9% of them were males. Among the patients in the intervention group, there were 38.9% retired ones, and 34.2% of the patients in the control group were housewives. The most common causes of kidney disease and require dialysis were diabetes mellitus 43/2% and hypertension 28/4%. Among the participants, 20.3% experienced renal transplantation and 67.6% were candidates for kidney transplantation.

Chi-square and t-tests were used to discuss the homogeneity of the variables in two groups. The results revealed that there were no significant statistical relations between the groups and all of variables, and two groups were homogeneous. Because the distribution of hope scores was not normal, in order to compare the mean scores of hope in dignity therapy and control groups, Mann-Whitney test was used before and one month after the intervention. The results showed that in preintervention stage there was no significant difference between the hope scores of the dignity therapy group (32.2 ± 3.2) and the control group (31.7 ± 4.0) . This means that these two groups were homogeneous (P =0.8), However one month after the intervention, the differences between mean scores of hope in the dignity therapy group $(34.1 \pm$ 2.7) and the control group (32.4 ± 3.9) was statistically significant (P = 0.038).

To compare the mean scores of hope before and after the intervention for each group (intergroup comparison), the Wilcoxon test was used. Results revealed that in dignity therapy group, the mean scores of hope before (32.2 ± 3.2) and after intervention (34.1 ± 2.7) had significant differences (P< 0.000); Although the results of the Wilcoxon test illustrated in the control group the mean score of hope before the intervention (31.7 ± 4.0) and after it (32.4 ± 3.9) , had not significant differences (P=0.188).(table 2)

Group							
Stage	Control	Dignity therapy	Total	Test			
Test	Mean ± SD	Mean ± SD	Mean ± SD	Mann-Witney test			
Before intervention	31.7±4.0	32.2±3.2	31.9±3.6	Z=0.12 P=0.832			
One month later	32.4±3.9	34.1±2.2	33.3±3.4	Z=2.07 P=0.038			
Wilcoxon test	Z=1.31 P=0.188	Z=3.391 P<0.000					

 Table 2: mean scores of hope in clients undergoing hemodialysis, before and after the intervention in dignity therapy and control groups.

To compare the mean score of dimensions of hope, before and after the intervention, Wilcoxon test was used. Results for the mean scores of cognitive-temporal dimension demonstrated that in dignity therapy group, before (10.4 ± 1.7) and after (11.1 ± 1.4) intervention, there was a significant statistical difference (P= 0.002), while the difference was not significant in the control group (P= 0. 408). In affective-behavioral dimension, the differences between mean scores before (10.8 ± 1.5) and after

the intervention (11.5 ± 1.0) was statistically significant (P= 0.012), however this difference was not significant in the control group (P= 0.110). The test results of affinitive-contextual dimension illustrated that in the intervention group, mean scores before the intervention (10.9 ± 1.1) and one month after intervention (11.4 ± 0.8) had differences significantly (P= 0.020), while in the control group this difference was not significant (P= 0.77).(table 3)

 Table 3: the mean scores of dimensions of hope in clients undergoing hemodialysis, before and after the intervention in dignity therapy and control group.

Hope dimensions	Group	Mean ± SD After intervention	Mean ± SD before intervention	Wilcoxon tes	st
cognitive-temporal	intervention	11.1±1.4	1.7±10.4	P=0.002	Z=3.15
	control	10.3±1.8	1.9±10.0	P=0. 408	Z=0.82
affective-behavioral	intervention	1.0±11.5	1.5±10.8	P=0.012	Z=2.51
	control	1.4±11.1	1.4±10.8	P=0.110	Z=1.59
affiliative-contextual	intervention	0.8±11.4	1.1±10.9	P=0.022	Z=2.28
	control	1.2±10.9	1.2±10.8	P=0.776	Z=0.28

Discussion

Results of the study demonstrated that in dignity therapy group, before and one month after the intervention, the mean scores of hope had a significant change and the mean scores of hope increased about 2 points, while in the control group, this difference was not significant.

The chochinove et al, (2005) performed a study about dignity therapy for patients who are suffering from cancer and mentioned that 68% of the patients reported that dignity therapy has increased their sense of having a purpose (17).

The results of the present study are consistent with Hall and colleagues (2011) results, in which dignity therapy has been done for patients who were suffering from advanced cancer. Their results showed that in both follow-up times (one and four weeks after dignity therapy), the intervention group reported a higher level of hope than the control group. Effect sizes were medium (partial $\eta^2=0.20$ and 0.15) and at one week follow up the difference was statistically significant (difference in adjusted means 2.55; 95% CI –4.73 to 0.36; P=0.02). (18).

However, in another study, in which Hall et al,. (2012) performed dignity therapy on older adults, the impact of this therapy on the hope level was not statistically significant before the intervention and 1 week (P=0.095) and 8 week after the intervention (P=0.20).(19)

In general, hope is known as an essential element, which affects all aspects of the life(20). Hong and Raw (2007) consider family support, religion, acceptance and knowledge about the disease as the four factors, which help the patient's hope enhancement(20). Actually, dignity therapy by inviting patient to engage to a dynamic process causes variations in the routine life of the patient which has been created during the process of coping with chronic illnesses such as chronic renal failure. In addition, speaking about the past, recalling memories, expressing wishes and sharing them with others through the "generativity document", makes the patient's life active, encouraging and creates goals in his life.

Moreover, this study's results revealed that in dignity therapy group, mean scores of hope significantly increased after intervention in all dimensions of hope.

Also in the study, mean scores of hope for cognitive-temporal dimension had a significant difference before and after intervention. Individuals, who have high levels of hope in this dimension, have a positive view of their lives; they do not have fears about the future, and have plans for today, tomorrow and the other days. The therapist tries to review the patient's goals and wishes of the past and future with him and by telling them to the patient's family or intimates facilitate the way for the patient to achieve them(6).

Also, mean scores of hope before and after the intervention for affective-behavioral dimension in intervention group, had significant differences. This dimension implies on the patient's purposeful functionality. By increasing this level, the patient feels the sense of control and leading their lives. They are also able to remember their sweet and enjoyable moments. In fact, the therapist helps the patient as a source of hope and cooperates with the patient and his family or intimates by improving their patience and also paying attention to the patient(6).

The results also demonstrated that mean scores of hope for affinitive-contextual dimension in the intervention group had significant differences before and after the intervention. This dimension indicates the relationship between one and others and also the God as the superior power. The therapist tries to improve the relations between the patient and others by expressing the patient's feelings to his intimates(6).

Conclusion

According to the results of this study, it can be concluded that the dignity therapy increases the hope in hemodialysis patients. Therefore, it is recommended to apply this therapeutic method for hemodialysis patients in clinical environment.

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References

1. Haresabadi M. The effect of familycentered emprowment on the Quality of life in patient with multiple sclerosis: Mashhad university of Medical sciecnces scholl of nursing and midwifer; 2010[persian].

2. Chochinov HM. Dignity therapy:Final Words for Final Days,A Handbook for Clinician. [book online]. E-mail to Harvey.chochinov@cancercare.mb.ca2010. 3. Sajadi M. The efect of self-care Education on depression in patients ondergoing hemodialysis: Mashhad university of Medical sciences scholl of nursing and midwifery; 2007[persian].

4. Jeimssadock B, Alkitsadok V. pockhet handbook of clinical psychiatry . Tehran: Arjmand; 2009.

5. Ghahremani Z, Alavi MJ, araghi MG, Hosseini F. Correlates of Quality of Life in the Family Caregivers of Schizophrenic Patients with Hope. jornal of nursing in iran. 1385;19(45):17-26[persian].

6. Shafie M. The effect of performding cardiac rehabilitaton program on level of hope patient after cronory artery bypass graft Mashhad university of Medical sciecnces scholl of nursing and midwifery; 2010[persian].

7. Sanatani M, Schreier G, Stitt L. Level and direction of hope in cancer patients: an exploratory longitudinal study. Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer. 2008;16(5):493-9.

8. Alaeddini Z, Kajbaf MB, Molavi H. The Effects of Group Hope-Therapy on Mental Health of Female Students in Isfahan University. jornal of Research on Psychological Health. 2009;1(4):67-76[persian].

9. Shoakazemi M, Momenijavid M. Relationship between Quality of Life and hope in cancer patient after surjery. jornal of breast disease in Iran. 1385;2(3,4):20-7[persian].

10. Snyder CR, Feldman DB, Shorey HS, Rand KL. Hopeful Choices: A School Counselor's Guide to Hope Theory. Professional School Counseling. 2002;5(5):298-308.

11. Ebright PR, Lyon B. Understanding hope and factors that enhance hope in women with breast cancer. Oncology nursing forum. 2002;29(3):561-8.

12. Davison SN, Simpson C. Hope and advance care planning in patients with end stage

renal disease: qualitative interview study. BMJ. 2006;333(7574):886.

13. Porghaznein T. A comparative study of hope in cancer patients after were treated with a full program: Mashhad university of Medical sciecnces scholl of nursing and midwifer; 2001[persian].

14. Ostlund U, Brown H, Johnston B. Dignity conserving care at end-of-life: a narrative review. Eur J Oncol Nurs. 2012;16(4):353-67.

15. Nasrin Abdi , Taghdisi H, Naghdi S. The Effects of Hope Promoting Interventions on Cancer Patients. A Case Study in Sanandaj, Iran, in 2007. jornal of Armaghan danesh. 2007;14(3):13-22[persian].

16. Parvandi Z. Effect of group reminiscence on disability of nursing home residents in mashhad(Iran) [Master of sciecnces in medical surgical nursing]: Mashhad university of Medical sciecnces scholl of nursing and midwifery; 2012[persian].

17. Chochinov HM, Hack T, Hassard T, Kristjanson LJ, McClement S, Harlos M. Dignity therapy: a novel psychotherapeutic intervention for patients near the end of life. J Clin Oncol. 2005;23(24):5520-5.

18. Hall S, Goddard C, Opio D, Speck PW, Martin P, Higginson IJ. A novel approach to enhancing hope in patients with advanced cancer: a randomised phase II trial of dignity therapy. BMJ Supportive & Palliative Care. 2011;10(1136).

19. Hall S, Goddard C, Opio D, Speck P, Higginson IJ. Feasibility, acceptability and potential effectiveness of Dignity Therapy for older people in care homes: a phase II randomized controlled trial of a brief palliative care psychotherapy. Palliat Med. 2012;26(5):703-12. Epub 2011/08/24.

20. Hong IWM, Ow R. Hope among terminally ill patients in Singapore: An exploratory study. Soc Work Health Care. 2007;45(3):85-106.