

Original Article

Correlation between Religious Beliefs and Quality of Life in Dialysis Patients Referred to Shahid Rahnemoon Hospital, Yazd-2012

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Abstract

Introduction: Unfortunately, there is no significant plan to improve the quality of life of chronic renal failure patients. Although they need mental support as well as physical rehabilitation but all current endeavors are focused on increasing their physical ability and not the mental aspect. The aim of this study was to evaluate the correlation between religious beliefs and quality of life in dialysis patients.

Materials and Methods: In this analytical descriptive study, the data were gathered by a questionnaire about patients' belief and quality of life of 56 patients, 20-60 years old, who were under dialysis treatment in Shahid Rahnemoon Hospital in Yazd. A questionnaire (SF36) collected the data related to the condition of the patient and his/her life quality, and another questionnaire was used to investigate the religious believes which include 66 questions regarding to religious cultures. The data were analyzed by SPSS 16 software putting the descriptive statistics into use. T-test and non-parametric tests were completed for data analyzing (with the level of significance of 5).

Results: In 24 women and 32 men who were under venous dialysis treatment, the correlation between the degree of religious belief and life quality was significant ($r= 0.34$, $P=0.01$). Moreover, the correlation between scores of religious belief and life quality in patients experienced 4 to 8 years of dialysis & correlation between score of religious belief and life quality among those who had chronic disease were significant ($r= 0.36$ & $r= 0.62$ respectively, $P<0.05$).

Conclusion: The results of the study showed that due to the influence of religious belief on life quality of patients who were under dialysis treatment, their life quality can be improved through the proper program of teaching religious belief.

Keywords: Religious Belief, Quality of Life, Spiritual Therapies, Dialysis

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Introduction

Chronic renal failure is one of the most important consequences of nephrogenic disease. When kidney function is disturbed at the highest level, proper living is not possible. Hence, in this case some alternative treatment including dialysis or kidney graft is necessary. The number of patients with high level kidney failure, who were under treatment by hemodialysis, peritoneal dialysis or kidney graft, raised to 22376 cases in 2005. According to the growth rate of 11% in recent years, it is estimated that it will be twice as much, more than 40000 cases.

At the last stage of kidney insufficiency (ESRD), treatment cannot be regarded as the real target but reaching the highest level of function and enabling patients to achieve daily activities is considered very imperative. According to the definition presented by World Health Organization, life quality is defined as complete physical, mental and social health, and not only lack of disease or disabilities. Moreover, it can be influenced by different social and demographic variables, disease and clinical conditions, and also by personal experience or understanding. Life quality is an indicator of improvement of efficiency. Life quality of patients with chronic disease related to their personal characteristics. In fact it depends on their compatibility proficiency in different situation and what they learned about self-control. Hence, in different situation, their answers can be different.

According to some recent studies, dialysis patients don't experience a good quality of life that's why nephrogenic insufficiency is not remediable and hemodialysis needs special treatment conditions. Such results are expectable thus special attention to their health is necessary. Unfortunately, there is no significant program for improving their life quality. Although they need mental support as well as physical rehabilitation but all current endeavors are focused on increasing their physical ability and no attention goes towards the mental aspect.

To improve their life quality, we focused on religious belief, believing in God, praying and accepting the destiny determined by Him, so that we can be able to endure discomforts. In this case, the mental needs are supplied and the ethics come to our mind, so as a human being, we can go beyond our body and experience peace, without feeling discomforts and any sense of mental tension.

In the study conducted by Viltis and Crider on 1650 people with average age of 50 years reported that there is a positive relationship between religious belief and mental health. Previously, Young in his study found that receding from religion and God or believing in some misleading ideas can result in psychopathic. Moreover, according to Kroll and Sheehan believing in God as who controls the different situations and supplies our needs, and praying to him can decrease the level of anxiety due to poverty, unemployment, illness

and etc. Religious behaviors including relying on God have a significant effect on life, and by creating hope, positive viewpoints and mental peace in patients. Pilgrimage also can decrease mental tension and so, as an active element, religion can be effective in this process.

Generally, an illness based religion on beliefs and activities can be effective in controlling excitements, stress, and physical pressure. Having targets, believing the Almighty, and trusting God in difficult situations, either socially or mentally, are sources of power for religious people being challenged with life pressures. According to what was previously mentioned, in addition to the importance of life quality among patients under dialysis treatment, there is also a lack of a significant program were the basis for investigation is the relationship between religious belief and life quality of patients under dialysis treatment.

Materials and Methods

This descriptive- analytical study investigated the relationship between the religious belief and the life quality of patients under dialysis treatment. The correlation between the degree of religious belief and life quality of dialysis patients was generally determined based on the length of the treatment period, age, sex, education level, income, family and their history of chronic disease. In this study, 56 patients of 20 to 60 years of age who were under dialysis treatment in Shahid Rahnemoon hospital were evaluated.

Data were gathered through a shorter-version of life quality questionnaire (SF36) which measured the patients' condition in their life quality in eight different dimensions including physical activities, physical constraint, physical pain, general health, happiness, social activity, mental disorders, and mental health.

In this questionnaire, the grades of different dimensions are in conclusion put into a scale of 0- the lowest level of life quality- up to 100- the highest level of life quality. The method of normal distribution was used to interpret and compare the results of SF36 scale. Another instrument used to gather data was the questionnaire of natural approach which studied religious belief including 66 questions to concern religious cultures. The lowest grade was 66 and the highest one was 322. The reliability and validity of the aforementioned questionnaire were confirmed by a national study conducted in 2008. In addition to these two questionnaires, the patients' demographic data including age, sex, level of education, income, dialysis treatment precedence, family history and chronic disease were also used. After explaining the purpose of the study to the patients and insuring them about the confidentiality of their information, the questionnaires were filled by patients who were referred to Shahid Rahnemoon hospital. Finally, after collecting the questionnaires, the gathered data was entered into SPSS 16 software and analyzed by Pearson correlation test on the level of significance of 5.

Results

The present study investigated 56 patients including 24 women and 32 men who were under dialysis treatment in Shahid Rahnemoon hospital. Among them 18% were uneducated, 43% were at elementary level of literacy, 28.5% at middle or high school level and 10.6% were graduate students. 89.3% had

chronic disease, 25% were under the age of 35, 21.4% were 35 to 45 years old, 17.9% were 45 to 55 years old, 14.3% were older than 55, 64.3% had less than 4 years of experience of dialysis treatment, 21.4% had 4 to 8 years of experience and 14.3% had more than 8 years of dialysis treatment.

Table 1: Correlation between religious belief and life quality scores based on sex

Sex	Number	Percentage	Correlation coefficient	P-value
Women	24	42.9	0.34	0.102
Men	32	57.1	0.32	0.072
Total	56	100	-	-

Table 2: Correlation between religious belief and life quality scores based on age

Age	Number	Percentage	Correlation	P-value
35>	14	25	0.39	0.161
35 - 45	12	21.4	0.56	0.057
46 - 55	10	17.9	0.55	0.097
55 <	20	35.7	0.28	0.284
Total	56	100	-	-

The results showed that the total correlation between the grade of religious belief and life quality was significant, 34% ($p=0.011$). Correlation between life quality and religious belief for patients who experienced less than 4 years of treatment was 23% ($p=0.176$), among patients with 4 to 8 years of treatment, it was 61% ($p=0.034$), and among patients with more than 8 years of treatment it was 0.08% ($p=0.833$). The correlation between life quality and religious belief among patients younger than 35 years of age was 0.39% ($p=0.161$), among patients who were 35 to 45

year -old, it was 0.56% ($p=0.057$), and among patients older than 55 years, it was 28% ($p=0.284$). The correlation between life quality and religious belief according to the variable of sex for women was reported 0.34 ($p=0.102$) and for men 0.32 ($p=0.72$). Correlation between life quality and religious belief according to the variable of education for the uneducated patients was 0.30 ($p=0.397$), for patients with elementary level was 0.31 ($p=0.135$), among patients with middle or high school level was 0.14 ($p=0.589$) and for graduate students it was 0.80 ($p=0.056$).

Table 3: Correlation between religious belief and life quality scores based on Education levels

Age	Number	Percentage	Correlation	P-value
Uneducated	10	18	0.30	0.397
Elementary school	24	43	0.31	0.135
Middle & high school	16	28.5	0.14	0.589
University	6	10.5	0.80	0.056
Total	56	100	-	-

Table 4: Correlation between religious belief and life quality scores based on chronic disease

Chronic disease	Number	Percentage	Correlation	P-Value
With	50	89.3	0.36	0.009
Without	6	10.7	0.18	0.725
Total	56	100	-	-

Based on income, this correlation for those who had less than 2 million Iranian Rials, was 0.89($p=0.299$), for patients with 2 to 4 million Iranian Rial income 0.753 ($p=-0.09$), for patients with 4 to 6 million Iranian Rial income, 0.39($p=.063$) and for patients with more than 6 million Iranian Rial income, it was 0.19 ($p=0.483$). The correlation between

life quality and religious belief according to family variables was 30% for families with less than 2 members ($p=0.086$) and 39% for families with more than 2 members ($p=0.064$). Based on chronic disease, for those who had such experience, it was 36% ($p=0.09$) and for those who did not, 18% 9($p=0.725$).

Table 5: Correlation between religious belief and life quality score based on income levels

Income (Rial)	Number	Percentage	Correlation	P-Value
<2	3	5.4	0.89	0.299
2-3.9	12	21.4	-0.09	0.753
4-6	20	35.7	0.39	0.063
> 6	20	35.7	0.483	0.483
Not mention	1	1.8	-	-
Total	56	100	-	-

Table 6: Correlation between religious belief and life quality scores based on disease experience (years)

Disease experience (years)	Number	Percentage	Correlation	P-Value
<4	36	64.3	0.23	0.176
4-8	12	21.4	0.61	0.034
>8	8	14.3	-0.08	0.0833
Total	56	100	-	-

Table7. Correlation between religious belief and life quality score based on family size

Family size	Number	Percentage	Correlation	P-Value
Up to 2	33	58.9	0.30	0.086
>2	23	41.1	0.39	0.064
Total	56	100	-	-

Discussion

Generally speaking and without taking these variables into account, a direct and significant correlation between life quality and religious belief was observed. Hence, our findings confirmed by Viltis and Crider's study showed that there is a direct relationship between religious belief and psychological health. In the study of Kcowing, it was reported that religion gives meaning and goals to people's life which can be regarded as a sign for psychological health and also enhance people's ability to do different things.

In addition, the results of this study were confirmed by the study of Watson et al. in which they concluded that people with deeper religious belief had a higher level of acceptance and psychological health. Based on the age variable, a direct and significant correlation between the degree of religious belief and life quality was observed among the 35 to 45 year-

old patients. In a similar study conducted by Iwan Yazbek & Loomis, it was reported that there is a relationship between the variable of age and mosque attendance showing that single and young people go to the mosques less than those who are older and married.

Based on the level of education, a direct and significant relationship was reported between the degree of religious belief and life quality that by increasing the sample size, it also becomes more significant. This conclusion was in contrast with the study of Amrollah Keshavarz showing that the higher the level of university education, the lower religious belief there is. Having Suffering from chronic disease other than nephrogenic insufficiency can result in a direct and significant relationship between the degree of religious belief and life quality; thus they need hope and belief in religion more than others.

The results of the present study confirmed by the study of Kcowing showing that believing in religion in people can construct a positive attitude toward life and make them more resistant when faced with loss or disease. Religious people simulate the prominent religious characters in their life leading to an increase in their enduring capability in intolerable situations.

In investigating the amount of correlation based on income level, it has been observed that the third level (4 to 6 million Iran Rials income per month) showed significant correlation and a direct and simultaneous relationship between the grade of religious belief and life quality which would be definitely significant by increasing the sample size. These results are in accordance with findings of Keshavarz's study emphasizing a significant relationship between expenses, income and religious belief.

Based on the disease history, it was shown that among patients, who had 4 to 8 years of disease history, there was a direct and simultaneous relationship between life quality and the grade of religious belief, thus patients accepted the imposed present situation resulting from the disease and somehow compensates this reality with their religious belief.

In other words, they actually know the important role of their religious belief in their improvement. So the convergence between religious belief and life quality in this group can

be easily justified. Kcowing in his study reported that religious people use a specific decision making model resulting in more beneficial decisions for them and their acquaintances which decrease the level of life pressure. Moreover, this study shows that religion is the only source for answering the final questions, especially in essential moments in which the human science is not capable of helping people in the moments most desperate which are very important in disease.

Based on the family variable, a significant correlation was observed between the grade of religious belief and life quality in families with more than 2 members, which can be increased by an increase of sample size. Higher level of family variable can be translated as more relations with acquaintances, being more paid attention to, and lesser isolation which are highly recommended in religion and result in compensating the loss coming from disease by having relations with acquaintances.

Conclusion

Most patients were highly satisfied being at the center of family attention and kindness so they had more hope and naturally higher level of life quality. According to this study and some other similar studies emphasizing the direct relationship between life quality and religious belief, the life quality of patients can be improved by keeping the religious program for increasing their belief.

References

1. Sayin A, Mutluay R, Sindel S. Quality of life in hemodialysis, peritoneal dialysis, and transplantation patients. *Transplant Proc* 2007; 39(10): 3047-53.
2. Eryilmaz MM, Ozdemir C, Yurtman F, Cilli A, Karaman T. Quality of sleep and quality of life in renal transplantation patients. *Transplant Proc* 2005; 37(5): 2072-6.
3. Zahedi F, Larijani B. Iranian model of kidney transplantation and approaches to ethical reinforcement. *Iranian Journal of Diabetes and lipid Disorders* 2007; 7(24):63-75.
4. Lazzaretti CT, Carvalho JGR, Mulinari RA, Rasia JM. Kidney transplantation improves the multidimensional quality of life. *Transplant Proc* 2004; 36(4): 872-3.
5. Shrestha A, Shrestha A, Valance C, Mckane WS, Shrestha BM, Raftery AT. Quality of life of living kidney donors: a single-center experience. *Transplant Proc* 2008; 40(5): 1375-7.
6. Lee SY, Lee HJ, Kim YK, Kim SH, Kim L, Lee MS, et al. Neurocognitive function and quality of life in relation to hematocrit levels in chronic hemodialysis patients. *J Psychosomatic Research* 2004; 57(1): 5-10.
7. Harirchi A, Rasooli A, Montazeri A. Comparison quality of life in hemodialysis patients and kidney transplanting patients. *Payesh J* 2004; 3(2): 117-21.
8. Ogutmen B, Yildirim A, Sever MS, Bozfakioglu S, Ataman R, Ereğ E, et al. Health-related quality of life after kidney transplantation in comparison intermittent hemodialysis, peritoneal dialysis, and normal controls. *Transplant Proc* 2006; 38(2):419-21.
9. Safi Zadeh H, Garoosi B, Afsharpoor S. Quality of life in hemodialysis patients. *Payesh J* 2005; (5):29-35.
10. Yildirim A. The importance of patient satisfaction and health-related quality of life after renal transplantation. *Transplant Proc* 2006; 38(9): 2831-4.
11. Galanter, M. (1982). Charismatic religious sects and psychiatry, an overview. *American Journal of Psychiatry*, 139, 1533-48.
12. Weiner, B., Grahan, S., Peter, O. & Zumuidinas, M. (1991). Public confessions and forgiveness. *Journal of Personality*, 59, 263-312.
13. Wentis, W. L. (1995). The relationship between religion and mental health. *Journal of Social Issues*, 15, 33-48.
14. Mousavi Lotfi SM, Gholamrezaye, The role of spiritual health on human health, *Danesh va Tandorosti* 2010:204.
15. Kroll, J., & Sheehan, W. (1989). Religious beliefs and practices among 52 psychiatric inpatient in Minnesota. *American Journal of Psychiatry*, 109, 673.
16. Pahlavani H, Dolatshahi B, Vaezi SA, Review of relationship between religious coping and mental health, *Olume Ensani*, Azad University, 1998(4); 21-25.
17. Morris, P. A. (1982). The effect of pilgrimage on anxiety, depression, and religious attitude. *Psychological Medicine*, 12, 2, 91-294.
18. Larson, D. B., Pattison, E. M., Blazer, D. G., Omron, A. R., & Kaplan, B. H. (1986). Systematic analysis of research of religious variables in four major psychiatric Journals, 1978-82. *American Journal of Psychiatry*, 143, 3, 329-334.

19. Koenig, H.G. (2004). Spirituality, Wellness and Quality of life, Sexuality Reproduction and Menopause, 2, P (76-82).
20. Keshavarz, A., Jahangiri, J. Sociological study of the relationship between socioeconomic status and their religious attitudes , Journal of Sociology, 1387
21. Watson, D.L. & R.G. Thrap (1994). Self-Directed Behavior: Self-Modification for Personal Behavior: Self- Modification for Personal Behavior Pub 1, Comp.
22. Yazik, I. Lumis, A. Spread of Islamic values in the United States, Translated by Vosugh, A. Organization of Islamic Culture Documents, Tehran, 1371.