

Observation of Psychological Characteristics and Quality of Life in Chronic Dialysis Patients

Nabavizadeh, Ebrahim¹, ShafiAbadi, Abdullah²

¹University of YERVAN state Expertise PhD Student of education science psychology

²Associate Professor of Allameh Tabatabaei, University in Tehran

ABSTRACT

Dialysis patients encounter great deal of problems during their life ,which these problems involve direct relation with their level and quality of life .also psychiatry disorders involve most of dialysis patients .some of this disease 's extensive outbreaks is due to various criteria for evaluating the behavioral disorders. Dialysis may be manifested through intense physical symptoms in patients .the aim would be Observation of psychological characteristics, attitudes and feelings in relation with quality of life while facing problems in chronic dialysis patients .society and sampling method includes 12 -65 years old patients who are under dialysis treatment .the whole participants in the research were 100 patients in which the randomized method was applied in two hemodialysis centers in Sari during three months.

Research instrumentation includes Eysenck personality questionnaire and NEO personality questionnaire .the discovery about this fact is that significant difference was observed between N,E and L in impatient and patient individual ,and also there is significant difference between N,E,A and C in impatient and patient individual ,while no significant difference was observed about O .discussion and conclusion would be this fact that ;according to various difficulties in relation with lifestyle ,disease and long-term treatment method in chronic dialysis patients and their mental , psychological problems and depression , so life dissatisfaction and affliction would be realized in these patients .provided that little attention and care, and resolving these patient 's mental problems, and the social and emotional protections from these patients along with resolving their physical problems could be effective in their recovery and would be ended in life satisfaction .

KEYWORDS: psychological characteristics, dialysis patients, life quality.

1. INTRODUCTION

Over recent years, dialysis patients are continuously increasing whether this is due to high cost of treatment in these patients. Patients with kidney failure need the Permanent hemodialysis vascularaccess in order to treat dialysis .caring the efficient vascular are highly important for these patients .dialysis patients apply two permanent access which are as: natural AVF-IV is formed of patient's vascular structure and the spun elastomeric graft in chronic dialysis patients. The most important principles of vascular access are the method of efficient access which is considered as an appropriate method for dialysis. In the other word; failure in vascular access, treatment's usefulness efficacy, quality of life, disease stages, being hospitalized in hospitals would increase the mortalities in dialysis patients. Thrombotic problems in AVF-IV and graft (poly tetra floratin) usually result in vascular access failure .also tromboz and infection result in vascular access for patients under hemodialysis.

Treatment .change is unavoidable in many mental aspects of life in chronic dialysis patients. The number of Dialysis patients are continuously increasing, that currently this number has increased over one third .according to the observations, this disease's outbreak is going to be increased in Iran. Person 's function disorder and also the effects of changes due to dialysis in quality of life could be resulted in alteration of occupational ,family and social situations. Psychiatry disorders in chronic dialysis patients involve over half of patients .based on the present observations, it is essential to point that depression is considered as the most Psychiatry problem in chronic dialysis patients (Elahi,1995).the positive effects of therapeutic group and consultative interventions are mentioned effective in depression reduction and antidepressant in chronic dialysis patients (Aratram 1989).also depression is a natural stage in adaptability within dialysis lifestyle which could be vanished over time and consistency of medical situation ,in the other word depression may get longer in patients (Richman 1972). Psychiatry disorders as behavioral diseases particularly depression, brain organic disease, schizophrenia and personal disorders are so common in ESRD patients. This extensive outbreak is due to the various criterias behavioral disorders evaluations. also, dialysis may be manifested due to so many physical symptoms, and also this disease is more common in Caucasians, patients who were not experienced this disease previously and the patients within low quality of life .according to Escandonet al studies (2001), depression and anxiety were respectively about %1.2 and %1.3 criterions in chronic dialysis patients and based on this; half of these patients involved at least one psychological disorder which depression was the most common one. Chaker et al (1996) , Sanski et al (1993)mentioned the mental disorders as a reason for treatment reduction, and announced that this

may lead to long term hospitalization ,and this involve direct relation with patients 's lifetime and immortality. personality characteristics and public health in chronic dialysis patients lead to more observations and studies of chronic dialysis patients of health situation in different regions among researchers such as Elahi et al (1995), Ashkani et al (2002), Teran and Eskandon et al (2001) ,Farmer et al (1979).Hopper (2000) could identify the psychology disorder in %1.3 of chronic dialysis patients through therapeutic interview, based on this it was specified that %1.5 of these patients suffer from anxiety and depression .in this study, it is attempted to observe the patient's psychological characteristics and their feelings and attitudes in relation with their quality of life in facing with disease's difficulties, particularly while referring to psychiatrist.

METHODOLOGY

The half structured and deep interviews are the data instrumentations in this research .here, it is attempted to describe accurately four criteria which are as validity, reliability, accuracy and transmission .the demographic of this research is involved of one hundred dialysis patients who were 12-65 years old, and the randomized method was applied on them for 3 months in two hemodialysis centers in Sari.

Measure

Following instrumentations have been utilized for data collection in this research.

Eysenck personality questionnaire

Eysenck (1963) recommended three uncorrelated (P,N,E)factors for personality characteristics ,and considered each of them as fundamental dimensions like introspection, extroversion, psychoticism for personality .the tests of personality characteristics based on analysis of structured factors along with the newest instrumentation about personality was submitted by Mack kordicosta (1985) and after an overview; the NEO 's personality characteristics was introduced by them .this questionnaire involved 240 phrases for measuring five factors such as psychoticism, extroversion, flexibility ,desirability and responsibility and involved 60 effective questions for measuring 5 fundamental factors .in order to recognize the personality characteristics ;the short form of questionnaire was utilized in this research in which the test is consisted of 60 options and its mark is based on Likret method.

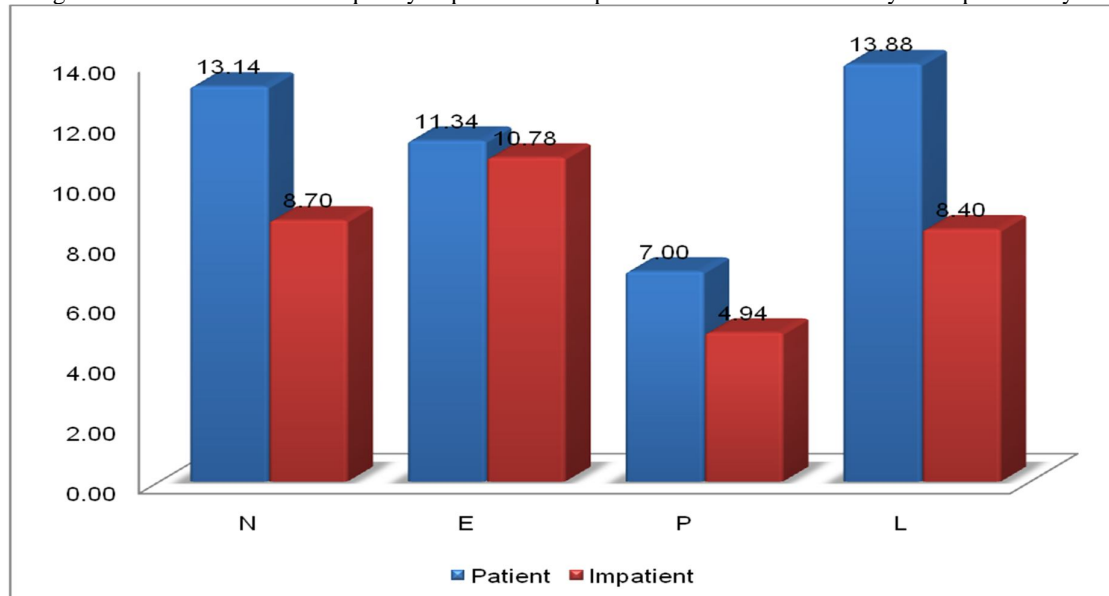
Analyses

Evaluation results has been presented for processing the data collections through methods of descriptive statistics (frequency, frequency percentage, mean, diagram, median, mode ,etc) and illative statistics(t test, Pierson's correlation coefficient), and all calculations were done via computer and SPSS/16 software.

Table 1 - the mean and standard deviation of patient and impatient individual based on Eysenck personality test

	N patient	N Impatient	E patient	E Impatient	P patient	P Impatient	L patient	L impatient
N Valid	50	50	50	50	50	50	50	50
Missing	0	0	0	0	0	0	0	0
Mean	13.14	8.70	11.34	10.78	7.00	4.94	13.88	8.40
Std. Error of Mean	.605	.377	.538	.186	.358	.182	.516	.305
Median	13.00	9.00	12.00	11.00	6.50	5.00	15.00	8.00
Mode	13	9	12	11	5	6	17	7
Std. Deviation	4.281	2.667	3.804	1.314	2.531	1.284	3.646	2.157
Variance	18.327	7.112	14.474	1.726	6.408	1.649	13.291	4.653

Diagram 1-the observation of frequency in patient and impatient individual based on Eysenck personality test



According to diagram 1, the highest and the lowest frequency in patient and impatient individual are respectively about scale of L and P.

Table 2-t test results for comparing patient and impatient individual based on Eysenck personality test

	Paired Differences					T	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
N patient - N Impatient	4.440	5.238	.741	2.951	5.929	5.994	49	.000
E patient - E Impatient	.560	4.136	.585	-.616	1.736	.957	49	.343
L patient - L impatient	5.480	3.950	.559	4.357	6.603	9.810	49	.000

The results of table 2 indicate that, there is significant difference (sig =0.5) in terms of N, E and L in patient and impatient individual

Table 3- Eysenck test of correlations between the patient and impatient individual

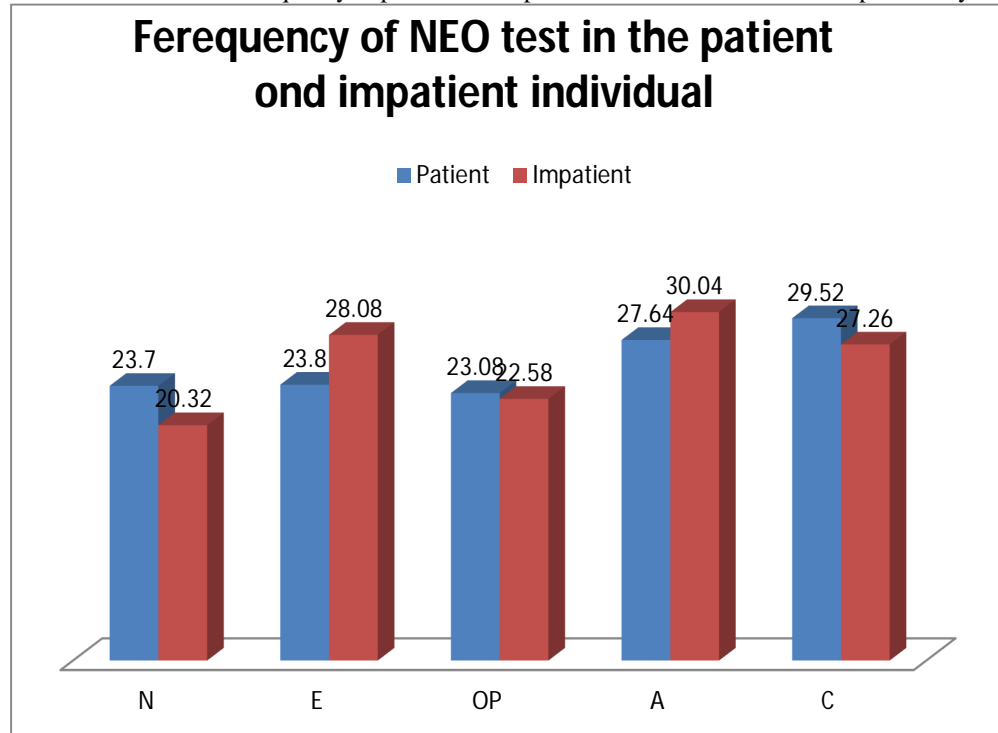
		N patient	N Impatient	E patient	E Impatient	P patient	P Impatient	L patient	L impatient
N patient	Pearson Correlation	1	-.087	-.390**	-.103	.056	.083	-.143	-.263
N Impatient	Pearson Correlation		1	-.022	-.171	-.112	.638**	-.090	.174
E patient	Pearson Correlation			1	-.091	-.083	.184	.080	.083
E Impatient	Pearson Correlation				1	.080	-.286*	-.044	-.040
P patient	Pearson Correlation					1	-.113	-.504**	-.123
P Impatient	Pearson Correlation						1	-.097	.362**
L patient	Pearson Correlation							1	.149
L impatient	Pearson Correlation								1
**. Correlation is significant at the 0.01 level (2-tailed).									
*. Correlation is significant at the 0.05 level (2-tailed).									

Results based on significance level show that there is significant and negative relation at $p<0.01$ level between N patient and E patient, and also there is significant and positive relation at $p<0.01$ level between N patient and E patient; as there is respectively low and high negative correlation at $p<0.01$ level between E impatient and P patient, and between P impatient and L impatient. also there is low and positive correlation at $p<0.01$ level between P impatient and L impatient.

Table 4- mean and standard deviation of patient and impatient individual based on Eysenck personality test

	N patient	N Impatient	E patient	E Impatient	Op patient	Op Impatient	A Patient	A impatient	C patient	C impatient
N Valid	50	50	50	50	50	50	50	50	50	50
Missing	0	0	0	0	0	0	0	0	0	0
Mean	23.70	20.32	23.80	28.08	23.08	22.58	27.64	30.04	29.52	27.26
Median	24.00	20.50	26.00	28.00	23.00	23.00	28.50	31.00	29.00	28.00
Std. Deviation	4.837	5.776	7.817	3.103	4.040	4.305	4.977	5.928	6.048	4.476

Diagram 2- the observation of frequency in patient and impatient individual based on NEO personality test.



According to diagram 2, the most and the least frequency of patient and impatient individual is respectively about A and N.

Table 5-t test results for comparing patient and impatient individual based on NEO personality test

	Paired Differences					T	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
N patient - N Impatient	3.380	7.329	1.036	1.297	5.463	3.261	49	.002
E patient - E Impatient	-4.280	8.320	1.177	-6.645	-1.915	-3.637	49	.001
O patient – OImpatient	.500	5.459	.772	-1.052	2.052	.648	49	.520
A patient - A impatient	-2.400	8.256	1.168	-4.746	-.054	-2.056	49	.045
C patient - C impatient	2.260	7.412	1.048	.154	4.366	2.156	49	.036

The results of table 5, show that there is significant difference about N, E, A and C in patient and impatient individuals, whereas no significant difference was observed inpatient and impatient individuals about O.

Table 6-NEO test of correlations between the patient and impatient individual

		N patient	N Impatient	E patient	E Impatient	O patient	O Impatient	A patient	A impatient	C patient	C impatient
N patient	Pearson Correlation	1	.055	.005	.143	-.005	-.083	-.114	.047	.026	-.059
N Impatient	Pearson Correlation		1	.166	-.266	.219	.376**	.069	-.601**	.168	-.170
E patient	Pearson Correlation			1	.031	.107	-.009	-.117	.005	.002	.158
E Impatient	Pearson Correlation				1	.076	-.288*	.102	.023	.136	.376**
O patient	Pearson Correlation					1	.145	.164	-.044	.245	.080
O Impatient	Pearson Correlation						1	.120	-.290*	.120	-.244
A patient	Pearson Correlation							1	-.140	.533**	-.194
A impatient	Pearson Correlation								1	-.097	.190
C patient	Pearson Correlation									1	.031
C impatient	Pearson Correlation										1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

According to results of significance level ,it is observed that there is significant and negative relation between N patient and A patient ,Op impatient at $p<0.01$ level ,and there is significant relation between E patient and C patient at $p<0.01$ level ,and there is low and negative correlation between Op impatient and A impatient at $p<0.05$ level ,and also there is average and positive relation at $p<0.01$ level .

CONCLUSION AND DISCUSSION

Kidney chronic failure leading to dialysis process is one of the physical diseases, this could put negative effects on individual's mental health. As we know there is direct relation between mental health and stress in individuals ; stress could be due to long duration of treatment through dialysis ,invasive method of treatment, long duration of treatment during each session and loosing the job .in the other side ,while the person is stressed the invasive methods would be necessary in this case. Falkman , Lazouras(1982)gathered long references in order to improve the mental health, that activity 's ability and health ,positive thoughts ,ability to resolve the problems, internal control resource ,being socialized ,being supported and financial facilities from invasive systems ,and also active and inactive efforts are involved in this group; and all mentioned factors are considered in threatening conditions by the purpose of resolving threats and reducing emotional sadness. Depression is the most common psychological problem in dialysis patients and it is as one of the most fundamental forecasted factors of therapeutic result about lifestyle in dialysis patients. Also factors such as sleep disorders, stress, anxiety, hopelessness, helplessness, inability for controlling the personal health are the most common factors in chronic dialysis patients. according to Brad research ;dialysis is a sustainable treatment leading to infection ,trompso , annurioumtisol, toxic septes, dialysis demanssendrom and creating increase of infected viruses .also disease outbreak leads to disorder in person 's function and also cause the alterations in the quality of life . studies by Sakahaei(2000) has shown that from physiological stressful factors ,the most and the least criterion respectively relates to fatigue and muscles 's inflexibility .from the social –mental stressful factors ;the most criterion respectively relates to dependency on dialysis system ,concerning toward future and the alteration in the body 's function ,also in relation with invasive methods against stress ;religious beliefs and faithfulness, consultation with physician and the treatment personnel and sympathizing have been used. Soltan (2007) announced in his research, patients's tolerance against disease would increase while the invasive methods against stress are trained to hemodialysis patients . Bebn (2001) announced in his study that hemodialysis patients utilize the self -problem method more ,means that in case of irritating situation , patients apply the active proceedings along facing with difficult situations .in contrast the patient who utilize the other emotion –oriented methods ,would involve low psychological adaptability . the results show that there is significant difference between the quality of life in men and women ,in a way that men involve higher quality of life than women .according to data ,women feel more helplessness and fear than men ,and there is significant difference in different occupational situations ,in condition that unemployed population involve lower quality of life .the statistical results between different levels of quality of life in married population showed that married population rather than divorced population involve better quality of life ,also researchers announced that married population in different levels of quality of life rather than divorced and single population involve better quality of life ;but Moursh believed that there is no significant difference between quality of life and marriage status .In relation with age ,it is indicated that over years and passing age ,the irritation situation would be highly increased. Merk believed that people who are elder than 55 years old would face more problems ;along this Logan announced that the access time of hemodialysis would not have effect in evaluation of irritation in psychological discussions ,but long term dialysis experience would lead to more challenges .

Depression outbreak has been reported % 1.5 and %1.3 in studies by Elahi (1374)andAgoona ,Markito(1997) . high percentage of depression in this study has specified the depression as a common disease in hemodialysis patients ,and physicians 's care and attention about identification and depression treatment along with variables such as age ,gender ,marital status ,education status ,occupational status and disease duration have been observed based on the depression importance in dialysis patients .studies indicate that there is significant relation between observed group and depression ,and the variable of dialysis duration is in accordance with Ferasati 's studies (1999).also despite studies of keravan et al (1987) ,there is significant relation between depression and age ,gender ,dialysis duration ,unemployment and marital status .no significant relation was observed between depression and mentioned variables .according to the study by odanel there is not significant relation between employment ,dialysis 's treatment duration and depression .also ,based on studies by Madanlo et al there is not significant relation between impositions of depression treatment and effective factors such as age ,education status ,marital status ,employment ,disease duration,the duration of analysis operation ;and only etiology factors would be treated with depression in this case .some observations reported the significant relation between gender ,age ,suffering from diabetes and depression. The results ofobservation showed no relation between problematic factors and adaptability methods .also, studies by Lak showed that there is significant statistical relation between irritative and adaptability methods. Also, adaptability methods are categorized into two main groups of emotion- oriented and problem –centered methods .generally patients 's adaptability methods in response to irritative factors appeared in a sentences which improved the optimisms in patients and they become more hopeful ;the emotion- oriented adaptability methods are applied more in these patients .the results of Lak observation (1996) indicate that patients are mentioned the social –mental irritative factors as the

more irritative factors ;and they have utilized the emotion- oriented methods more .also they announced the adaptability problem-centered methods as effective methods in controlling irritations ,this was in accordance with results of study .Zahaymer (1995)announced about peritoneal dialysis patients that these people could have the natural life ,and could be able to think about good things in their life in which emotion-oriented have been utilized more than problem-centered methods ;and also the study by Zahaymer was in accordance with Lak study. Baqerian et al (1999)found that dialysis patients have less tendency to use direct invasive method and they consume more pill while facing problems .along this ,Sinar et al (2009) found that three major irritative factors are involved in these patients which are as low entertainment ,fatigue and mistrust toward future ;and there are various effects and results in different beliefs and cultures .in the other side ,chang et al (2002) found about utilizing the adaptability methods in two groups of women and men ,that in more cases women utilize the emotion- oriented methods ;and in this relation they are in danger about controlling their disease that the result was not in accordance with the study 's results .Spearman 's statistical test results indicate the inverse correlation in peritoneal dialysis ,and also indicate the weakness between individual and utilizing the adaptability methods ,that all these results were not in accordance with Zahaymerstudies (1995).anxiety was more was more manifested in this disease ,and along this kidney chronic failure and dialysis are the intensifiers factors of anxiety in patients .in this relation ,it is expected that anxiety would be reduced in patients with kidney failure by utilizing the dialysis treatment ,but this would not be true in more cases .

Hallucination is another symptom in dialysis disease in which patients think that people are aware of their thoughts ,in this case they would be shy and could not be able to defend from themselves .in this situation patients become more faithful and whatever disease proliferates ,the psychological disorders would be more obvious in these patients which this leads to depression .while patients are concerned ,at this time they use to backbite or talk with others ;also these patients are more dizzy and could not be in a place for a long time .in this case others could inform these patients 's reactions to them in order to make them adaptable with new situation to resolve their problems .in case of rejecting the others 's help and consultations these patients would feel behavioral disorders more which this lead to telling lie and misbehave in these patients .also ,reduction of mental risk in dialysis patients through recommendation of life quality methods and behavioral relations and patients 's relations with society has become more favorable ,in this situation they face less mental difficulties .in contrast they overcome the disease and also recovery would be proliferated for them .also according to observations it was specified that psychiatry disorders are more significant in dialysis patients than personality disorders .due to this ,dialysis patient 's lifestyle have to be recovered through adaptability methods ,and they could overcome difficulties .in basis of psychological affairs through accepting the primal conditions in patients life ,this would be resulted in improvement of life quality and recovery of disease in a way that patients would feel better and would be more energetic as well; so difficulties about hearing or eyesight would be reduced and they would feel more vitality in all stages of life .in the other word, they would not be hopeless in their life and would feel the controllable sensitivity in order not to be reluctant in social activities . Chronic dialysis patients would lose their hesitation and concentration due to drugs consumption, long-term treatment and wasted energy. Identification of time and place would be difficult for them, also they could not be aware of everything and they could not be able to speak about a topic while talking among people; so on the whole life would be difficult and sufferable for these patients .hence these patients prefer to be alone due to their chronic disease , disease outbreak and psychological difficulties ;because stress and anxiety would be increased in these patients .based on psychological outlook , dialysis patients have tendency to successful activities due to their particular conditions. Thus these patients are not stable in their life and they would be sad and depress in case of any criticism and failure .individual who were punished a lot in their childhood, would behave in their adulthood in a way that nothing and nobody is important for them, and telling lie and hoaxing is not important for them at all ,also they would be happy in case of their friends 's difficulties .these individual are mentioned as introvert and unstable individuals who are not adaptable with their entourage and due to introspection, they do not consult anything with others even in case of any difficulty ;the other point is that because of being shy they could not even defend from themselves .they have an imaginative life which they are not able to tell anything about it to others .these individual would face mental crisis due to psychology reasons and difficulties ,that this would lead to physical vulnerabilities in these patients . overall these patients would be aggressive and upset due to the mentioned reasons .due to various difficulties which dialysis patients suffer from them in their lifestyle and treatment method ,and also they would be depressed regarding difficulties in mental and psychological vulnerabilities .dissatisfaction and low quality life is expected in these patients whereas a little attention and care about these patients ,and putting effort to resolve their problems and also social and emotional protection would help these patients in order to believe themselves .Dialysis patients beside suffering physical difficulties could improve their life quality and socialize with others in society through psychological dimension in which they would finally involve the high quality of life in their lifestyle.

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