



EFFECT OF SPIRITUALITY AND IRRATIONAL BELIEFS ON RESILIENCE IN DIALYSIS PATIENTS

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Abstract:

The study explored the relationship between Spirituality, Irrational Beliefs and Resilience among Dialysis patients. Sample consisted of 150 men and women with an age range of 10 to 80 years. Sample was collected from various hospitals of Rawalpindi including MH, CMH, Benazir Hospital, and Fauji Foundation Hospital by using purposive sampling technique. Along with the informed consent and the demographics sheet, three instruments were used for the data collection, Spiritual Assessment Inventory (Hall & Edwards, 1996), Irrational Belief Scale (Malouff et.al, 1987) and the Resilience Scale (Wagnild & Young, 1993). Urdu versions of all three of the scales were used. Correlational research design was used. Correlation, Regression and Moderation were used to test the hypothesis. The results showed that there was a significant positive relationship between spirituality, irrational beliefs and resilience. Irrational belief was non-significant while spirituality was a significant predictor of resilience. Moderation Analysis suggests that the time period of treatment acts as a moderator between irrational beliefs and resilience. It has an impact on a range of healthcare issues, from specific patient treatment to more general policy decisions, ultimately leading to a more patient-centered and holistic approach to managing chronic illness.

Keywords: Dialysis, irrational beliefs, spirituality, resilience

Introduction

Chronic diseases adversely affect all physical, mental, and social aspects of a person's life, as they are long term, incurable without intervention. Chronic diseases are undeniable stressors, as they threaten welfare, physical integrity, future plans, and financial stability and undermine the ability to fulfill family, social, and professional roles. Spirituality is a wide concept with room for many perspectives. In general, it includes a sense of connection to something bigger than us, and it involves a search for meaning in life (Krentzman, 2017). According to researcher chronic kidney disease patients' spirituality play a very significant role and it has positive influence on health-related quality of life, mental health of the patient and also increases life expectancy. Spirituality during disease is very important because when other coping mechanisms are not working then religious beliefs help them to become hopeful and provide good support to individuals. It was found that 20%-30% patients

who are going through dialysis becomes depressed but only those patients whose spiritual needs are full filled are seemed to be less depressive and anxious (Eslami et al., 2014).

Irrational beliefs and the components of automatic thoughts are found to be in relationships and have a specific role in the cause of anxiety and depression. Irrational beliefs are somehow responsible for automatic thoughts and hence cause psychological problems such as anxiety and depression. Relationship between automatic thoughts and irrational beliefs predicts anxiety and depression. Irrational beliefs are considered the primary factor, these irrational beliefs lead to automatic thought processes (Buschmann et al., 2018). Cash (1984) found that irrational beliefs mediate various affective and behavioral disorders. Irrational beliefs affect our locus of control, cognitive set for success and failure, interpersonal assertion and depression. Irrational belief test (IBT) is a prominent self-reporting instrument which assesses dispositional rationality-irrationality with respect to 10 beliefs which are proposed by Ellis.

Resilience is that ineffable quality that allows some people to be knocked down by life and come back stronger than ever. It is a positive adaptation regardless of adversity (Fleming and Ledogar, 2008). A process, or an outcome, and it is often tempting to take a binary approach in considering whether resilience is present or absent. However, in reality, resilience more likely exists on a continuum that may be present to differing degrees across multiple domains of life (Pietrzak & Southwick, 2011). Realizing that taking care of a person's physical needs is just as important as taking care of their spiritual and psychological needs. Understanding spirituality's role can help create a more all-encompassing approach to patient treatment, as it is frequently viewed as a critical element of holistic health.

Chronic conditions that require dialysis, including kidney disease, can cause a great deal of stress and emotional difficulties. Researchers can learn more about people's coping mechanisms by investigating spirituality and illogical ideas. In this sense, resilience is the capacity to overcome adversity; researching these characteristics can reveal useful coping strategies. The objectives of the present study were formulated on the basis of the literature review. The following objectives are listed below:

1. To find out the relationship between spirituality, irrational beliefs and resilience among dialysis patients.
2. To investigate spirituality and irrational beliefs as a predictor of resilience among dialysis patients.
3. To investigate the moderating role of time period of treatment between irrational belief and resilience among dialysis patients.

and it was hypothesized that there will be a significant relationship between spirituality, irrational beliefs and resilience among dialysis patients. Spirituality will significantly predict resilience among dialysis patients. Irrational beliefs will significantly predict resilience among dialysis patients. Time period of illness will play a moderating role between irrational beliefs and resilience,

Methodology

Cross sectional research design was used in this Research. Data is collected through purposive sampling technique. Participants included in the research were patients that had been undergoing dialysis for at least a month and those that had their dialysis done in hospitals only. The sample consisted of one hundred and fifty (Male n=97, Female n=53) patients that were undergoing dialysis participated in the study. Age groups ranged from 12 years to 65 years. Data was collected from multiple hospitals across Punjab, Pakistan. Scales that we used to collect Data is Spirituality Assessment Inventory was developed by Hall and Edwards in 1996. Irrational belief scale that was developed by Malouff and Schutte (1986); it is a self-report inventory that consists of 20 items. The Resilience scale. was developed by Wagnild and Young in 1993,

Procedure

The study was conducted after taking the consent from the higher authority of the hospitals including MH, CMH, Benazir Hospital, and Fauji Foundation Hospital. The selected scales were administered on patients undergoing dialysis. All the patients were informed about the confidentiality of the

information that the information was taken only for the research purposes to make them feel as comfortable as possible while giving the information. The patients were approached individually and were requested to fill the questionnaire if they were willing. In the beginning the individuals were asked to read the consent and sign it.

Results

Table 1 Descriptive statistics & Alpha reliability of the study variable (N=150)

Scales	N	α	M	SD	Skew	SE
Spirituality Assessment Scale	54	.86	200.07	26.16	-.39	.19
Awareness	19	.76	87.57	8.10	-1.53	.19
Realistic acceptance	7	.72	26.91	8.06	-1.06	.19
Disappointed factor	7	.65	12.18	5.67	1.01	.19
Instability	9	.78	25.91	9.43	0.26	.19
Grandiosity	7	.49	26.13	4.67	-1.13	.19
Impression Management	5	.45	21.38	3.14	-.73	.19
Irrational Belief Scale	19	.86	73.64	14.64	-.92	.19
The Resilience Scale	26	.90	150.15	27.26	-1.12	.19

The study examined the relationship between spirituality, irrational belief and resilience among dialysis patients. To measure these constructs, Spiritual Assessment Inventory, Irrational Belief Scale and The Resilience Scale were used. Cronbach Alpha was computed in order to estimate the reliability of these measures for the present sample. Table 2 shows that the alpha coefficient for all scales and subscales are within the recommended range suggesting that the measures are reliable for the present sample. Furthermore, descriptive analysis showed that data was normally distributed. Table 2 indicates that α represents Cronbach Alpha, M for mean, SD for standard deviation, Skew for Skewness and SE for standard error in the study. The values in table 1 are reliable to be used for current data.

Table 2 Correlations among Spirituality assessment scale, Irrational Belief scale and The Resilience scale (N=150)

Scales	1	2	3	4	5	6	7	8
AW	-	.31**	.43	.26**	.48**	.48**	.35**	.37**
RE		-	.41**	.39**	.34**	.11	.29**	.25**
DI			-	.61**	.19*	.06	.31**	.14
IN				-	.28**	.23**	.39**	.33**
GR					-	.32**	.24**	.14**
IM						-	.10	.33**
IBS							-	.23**
TRS								-
M	87.57	26.91	12.18	25.91	26.13	21.38	77.67	146.1
SD	8.10	8.06	5.67	9.43	4.67	3.14	15.31	26.87

Note, AW= Awareness; RE= Realaccp; DI= Disappfact; IN= Instability; GR= Grandiosity; IM= Impression Manage; IBS= Irrational Belief Scale; TRS= The Resilience Scale; M=Mean; SD= Standard Deviation ** $p < .01$ and * $p < .05$.

Table 2 shows that the correlation of Awareness Is highly significant with grandiosity ($r = .48^{**}$) and Impression management. Correlation of Disappointment factor is highly significant with Instability ($r = .61^{**}$). Correlation of Instability is highly significant with irrational beliefs ($r = .39^{**}$). Correlation of grandiosity is highly significant with impression management ($r = .32^{**}$). Correlation of impression management is highly significant with resilience ($r = .33^{**}$). Correlation of Irrational belief is highly significant with resilience ($r = .23^{**}$).

Table 3 Multiple linear Regression analysis tests the effects of spirituality and irrational beliefs on Resilience. (N=150)

95% CI	B	SE	B	LL	UL
Constant	23.6	22.6		-21.2	68.4
Awareness	.83	.33	.25**	.17	1.4
Realistic Acceptance	.47	.29	.14	-.011	1.0
Disappointment Factor	.31	.47	.06	-.61	1.2
Instability	.00	.29	.00	-.57	.57
Grandiosity	-.74	.51	-.12	-1.7	0.26
Impression M	1.8	.74	.22**	.41	3.3
Irrational Beliefs	0.15	.15	.08	-.14	.45
R^2	.214				
ΔR^2	.175				
F (7,142)	5.512***				

Note. CI=Confidence Interval; LL= Lower Limit; UL=Upper Limit

* $p < 0.05$, *** $p < 0.001$

It shows that awareness and impression management are a significant predictor, whereas grandiosity shows to be a negative predictor. The realistic acceptance, disappointment factor, instability, and grandiosity could not significantly contribute to predicting resilience. The value of R^2 shows that subscales of spirituality explained a total of 21 % variance in resilience. The above-stated prediction is significant as $F(5.512) = 5.512, p < 0.001$. (As shown in table 3)

Table 4 The table shows the moderation between time period of treatment, irrational beliefs and resilience. Tp= time period of treatment, IRR= Irrational beliefs

	B	SE	t	p
Constant	145.63 (141.44,149.81)	2.12	68.74	0.00
Tp	-2.31 (-3.59,-1.03)	0.65	-3.57	0.00
IRR	0.43 (0.13,0.72)	0.15	2.86	0.00
Tp X IRR	-0.09 (-0.16,-0.03)	0.03	-2.91	0.00
R^2	0.14			
ΔR^2	0.15			
F(3)	146			

Note. Tp= time period of treatment, IRR= Irrational beliefs

Table 4 shows that time period of treatment was a significant predictor of resilience ($B = -2.31, P < 0.05$). Irrational belief was a significant predictor of resilience ($B = 0.43, P < 0.05$). The interaction between the time period of treatment and irrational beliefs was significant. The results in the following table suggest that the time period of treatment acts as a moderator between irrational beliefs and resilience ($B = -0.09, P < 0.05$).

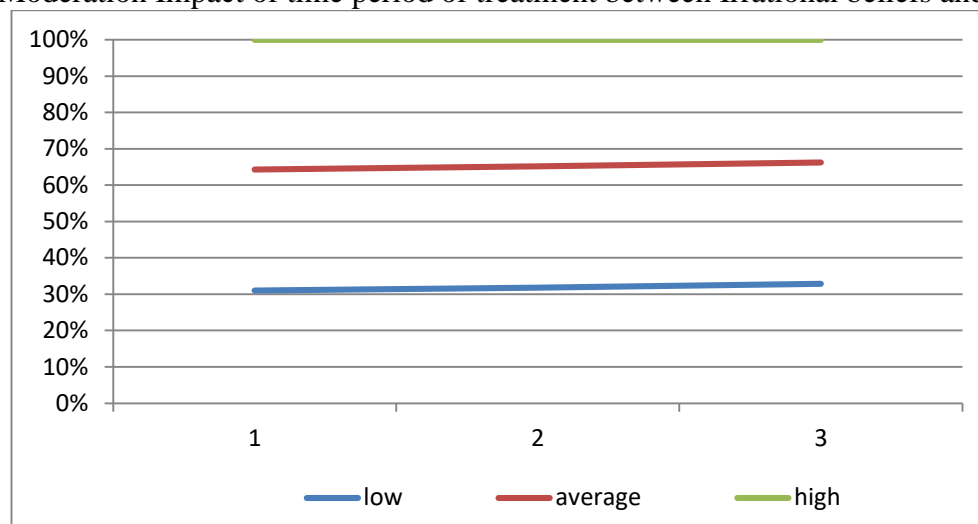
Figure 1 Moderation Impact of time period of treatment between Irrational beliefs and Resilience

Figure 1 shows the graphical representation of the moderation analysis. This depicts the interaction term between irrational beliefs and time period of treatment. $\Delta R^2=0.15$, $p=0.00$, $b=-0.16$, $-0.03=-0.09$, $p<0.05$. The interaction effect revealed that as the time period of treatment increases the effect on resilience decreases. As irrational beliefs increase and the time period of treatment is comparatively low the level of resilience increases.

Discussion:

Patients going through dialysis face enough stress due to the prolonged and chronic illness; this may affect their level of resilience. Spirituality may act as escape from the stress that dialysis patients go through. With such a prolonged illness, patients may develop irrational beliefs which may be affected by the level of resilience and spirituality. The study was conducted to explore the relationship between spirituality, irrational beliefs and resilience among patients undergoing dialysis. Vicariate correlation was computed to explore the relationship between the variables of the study. The study reveals that correlation is highly positive and significant but it depends on multiple factors such as age, gender economic status etc. This study was conducted to evaluate the relationship of spirituality with dialysis patients. The results revealed that irrational beliefs among dialysis patients are highly strong and significant. They affect every aspect of their treatment.

According to our hypothesis spirituality and irrational belief determine resilience among dialysis patients. A result similar to our study was found in another research according to that research. The effects of spirituality may be mediated by social support. Larger, multicenter, prospective studies that use well-validated tools to measure religiosity and spirituality are needed to determine whether there is an independent association of spirituality variables with survival in patients with ESRD. (Spinalle.J. et.al, 2008). It was hypothesized that spirituality and irrational belief will significantly predict the resilience among dialysis patients. The subscales of spirituality (awareness, impression management) show significant results with resilience. Another body of evidence supported the results; the participants used religious/spiritual coping mechanisms as a strategy to cope with the disease, particularly women with a higher family income who attend church every week (Valcanti et.al, 2012). Further researches supporting the results investigated that spiritual beliefs are associated with decreased perception of burden of illness; decreased depressive effect; increased perception of social support, and higher satisfaction with life and perception of quality of life were independently associated with survival in hemodialysis patients in an urban population (Spinale et al., 2008). One of the core objectives of the study was to find out whether any of the demographic plays a moderating role between irrational beliefs and resilience. Table 4 shows the moderating role of time period of treatment between irrational beliefs and resilience. The results were significant, this means that the time period of treatment will play a moderating role between irrational beliefs and resilience. Manning and his fellows (2016) found out that resilience reduces the deleterious consequences related to the

onset of chronic condition and disability. It means the greater the time period of treatment, the fewer the irrational beliefs and the higher the resilience. The graphical representation of moderation analysis shows that the interaction effect was significant. Time period of treatment plays a moderating role between irrational beliefs and resilience. When irrational beliefs increase and the time period of treatment is less than the level of resilience increases.

Limitations and suggestions

Inpatients having treatment were not included in study. Patients that were less than 10 years of age were not included in the sample. Patients who are suffering from chronic illness were also not part of our sample. Patient's ages above 65 years were also not included in our sample. Those patients who were not psychologically well were not included in the sample. In future inpatients having treatment were included in study. Qualitative study could be done in which they can know the subjective experiences of the patients. Broader age sample should be included in the study. Sample size can be increased by adding patients from all across Pakistan.

Conclusion:

Spirituality, irrational beliefs and resilience have a significant relationship with each other. Spirituality increases the resilience and irrational beliefs decrease the resilience among dialysis patients. Time period of treatment act as a moderator between irrational beliefs and resilience. It has an impact on a range of healthcare issues, from specific patient treatment to more general policy decisions, ultimately leading to a more patient-centered and holistic approach to managing chronic illness.

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