

RESEARCH ARTICLE

IMPACT OF DEATH ANXIETY ON RESILIENCE AMONG PATIENTS WITH CHRONIC KIDNEY DISEASE: ROLE OF SOCIAL SUPPORT AS MODERATOR

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ABSTRACT

Background: There are so many cases report with death anxiety in Chronic Kidney Disease (CKD). Death anxiety leads toward various types of psychopathologies as well as numerous disorders. Excessive death anxiety also affects the resilience level of CKD patients. **Objective:** to find out the impact of death anxiety on resilience among patients with CKD moderating role of social support. **Methodology:** This study design was Correlational. The sample consists of n=150 patients with CKD. Data was collected from different hospitals of Multan, Bahawalpur, and Lodhran. The CKD patients with age range from 15 to 25 years diagnosed with stage 3-5 of chronic kidney diseases on hemodialysis/peritoneal dialysis and kidney transplantation were included in the study. The Death Anxiety scale-Urdu Child and Youth Resilience Measure- Urdu and Multidimensional Scale of Perceived Social Support Version-12 was used for data collection. **Results:** The correlation analysis among study variables shows that death anxiety has significant negative correlation ($p < 0.01$) with resilience ($r = -0.55$). The overall model explained the 44% of variance with $F = 57.08(2,147)$, $p < 0.001$ for resilience, whereas in step 2, social support was found significant predictor ($R^2 = 41$, $B = 0.39$, $\beta = 0.64$, $p < 0.01$) of resilience and moderator between death anxiety and resilience. From step 3, death anxiety was similarly established significant negative predictor ($R^2 = 47$, $B = -0.24$, $\beta = -0.33$, $p < 0.01$) of resilience. Additionally, in step 4, the interaction of death anxiety and social support was found significant for resilience ($R^2 = 49$, $B = -0.01$, $\beta = -0.56$, $p < 0.01$). **Conclusion:** there is a negative relationship between death anxiety and resilience. Social support significantly moderates the relationship between death anxiety and resilience.

Keywords: Chronic kidney disease, death anxiety, resilience, social support.

INTRODUCTION

All over the world the incidents of chronic disease has been considered as a major health concern among people of all age ranges, culture and socioeconomic classes¹. Prevalence of CKD is higher among indo-Asian countries as compared to European countries. According to the Human Development Index, Pakistan is a low resource country and has a high prevalence of kidney related disease. The ratio in Pakistan of end-stage renal disease is as, 100 people have this disease out of one million peoples².

The CKD causes so many physiological, psychological as well as relationship complications in patient's life. Such as, physical problems include cardiovascular problems, joint pain, anemia, uremia, and other infections due to dialysis³. Patients suffering from CKD make frequent mental adjustment and alteration throughout the period of the illness. Because anxiety and depression are the main mental disorders faced by CKD patient⁴. Death is the only thing that brings certainty in the life of a person and still it is very common cause of anxiety. People don't know about what would happen after death make them anxious⁵. In chronic patients there are so many factors that contribute in the

uncertain situation of death anxiety such as waiting for test results, receiving ambiguous results of different tests, receiving conflicting feedback from different health care providers⁶. Different studies reported that depression, anxiety and poor quality of life were common in patient of pre-dialysis CKD and hemodialysis patients with females have higher level of death anxiety than males⁷⁻⁸.

Resilience helps to prevent psychological problems as well as protects people from psychological effects of troublesome events⁹⁻¹⁰. Social support works as an independent factor and affect on the survival of patients undergoing kidney related problems¹¹. Chronic diseases impose a larger stress and anxiety on individual person among them specific death anxiety is common¹². Those patients receiving appropriate levels of emotional, social, instrumental, and informational support recovered faster and better as compare to other patients. The social support may impact the death anxiety ultimately improve resilience among patients with chronic kidney disease. There is paucity in the literature regarding the topic in Pakistani population. So objective of the study was to find the impact of death anxiety on resilience among

patients with chronic kidney disease while exploring the moderating role of social support.

METHODOLOGY

A Correlational study was conducted on n= 150 diagnosed cases of from June 2021 to September 2021 from different hospitals of Multan, Lodhran and Bahawalpur. The non-probability Purposive sampling method was used for sample selection. The CKD patients with age range from 15 to 25 years diagnosed with stage 3-5 of chronic kidney diseases on hemodialysis/peritoneal dialysis and kidney transplantation were included in the study. The patients with multiple comorbidities were excluded from study.

The Death Anxiety Scale Urdu translated 15 items scale was used to measure death anxiety which is reported to reasonable reliable and valid to measure.¹³ The Child and Youth Resilience Measure-Revised was used to measure Resilience¹⁴ and the Multidimensional Scale of Perceived Social Support Version-12 Items as used to measure social support of participants¹⁵ are reliable and valid tools. The statistical association between variables, Pearson correlation coefficient test used. Multiple hierarchical regression analysis was used to find out the moderating role of social support between death anxiety and resilience. An independent samples t-test was used to assess the mean difference between female and male kidney disease patients. Data was analysed by using SPSS version 21.

RESULTS

A total of n=77 participants were female and remaining n=73 was male in the study. Most participants have age above the 20 years (n=135) and below 20 were n=15. A total n=127 were belong to middle, n=8 was from upper and remaining n=15 was from low socioeconomic status. The frequency distribution of the occupation, marital status, family system, diagnosis time, history of kidney transplant and patients on dialysis can be seen in table 1.

Table 1: Frequencies and Percentages of Demographic Variables (N=150)

Variable		f	%
Occupation	Government Job	34	22.7
	Private Job	11	7.3
	Labour	39	26.0
	Housewife/Nothing	66	44.0
Marital Status	Unmarried	127	84.7
	Married	23	15.3
Family System	Joint	86	57.3
	Nuclear	64	42.7
Diagnose time	1 Year or Less	64	42.7
	2 Years or Less	29	19.3
	3 Years or Less	13	8.7
	4 Years or Less	44	29.3
Kidney Transplant	Yes	7	4.7
	No	143	95.3
Dialysis	Yes	61	40.7
	No	89	59.3

The correlation analysis among study variables shows that death anxiety has significant negative correlation ($p < 0.01$) with resilience ($r = 0.55$) (Table 2).

The results show that after demographics controlling variables (i.e., age, marital status, and socioeconomic status) in step 1. Social support (moderator) in step 2, spiritual intelligence (predictor) in step 3, and interaction terms between predictor and moderator in step 4 were entered. The overall model explained the 51% of variance $\{F(2,147) = 75.65, p < 0.01\}$ for resilience, whereas in step 2, social support was found significant predictor ($R^2 = 0.41, B = 0.39, \beta = 0.64, p < 0.01$) of resilience and also moderator between spiritual intelligence and resilience. From step 3, spiritual intelligence was similarly established significant positive predictor ($R^2 = 0.52, B = 0.20, \beta = 0.37, p < 0.01$) of resilience. Additionally, in step 4, the interaction of spiritual intelligence and social support was found significant for resilience ($R^2 = 0.53, B = 0.002, \beta = 0.41, p < 0.01$). (Table 3)

The comparison between male and female showed that male has significantly less death anxiety (34.18 ± 11.38 ver. $42.23 \pm 9.33, p < 0.001$) as compared female, while more significant resilience (72.71 ± 8.15 ver. $66.09 \pm 6.64, p < 0.001$) and social support (68.96 ± 12.78 ver. $61.08 \pm 12.54, p < 0.001$) than female. (Table 4)

Table 2: Correlation between study variables (N=150)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.SISRI	-	.84**	.82**	.82**	.87**	-.47**	-.40**	-.40**	-.33**	-.35**	.54**	.56**	.38**	.29**	.11	.21**	.38**
2.CET	-	-	.56**	.58**	.66**	-.42**	-.37**	-.32**	-.32**	-.42**	.39**	.43**	.25**	.31**	.21*	.21**	.31**
3.PMP	-	-	-	.51**	.73**	-.43**	-.39**	-.40**	-.22**	-.30**	.58**	.54**	.48**	.28**	.12	.16	.40**
4.TA	-	-	-	-	.56**	-.23**	-.20*	-.18*	-.22**	-.15	.34**	.39**	.20*	.11	-.08	.17*	.15
5.CSE	-	-	-	-	-	-.52**	-.42**	-.51**	-.35**	-.32**	.53**	.54**	.38**	.32**	.15	.16*	.46**
6.DA	-	-	-	-	-	-	.88**	.89**	.74**	.57**	-.55**	-.62**	-.35**	-.56**	-.32**	-.54**	-.47**
7.ToD	-	-	-	-	-	-	-	.63**	.49**	.53**	-.43**	-.49**	-.26**	-.43**	-.23**	-.40**	-.38**
8.DR	-	-	-	-	-	-	-	-	.59**	.37**	-.57**	-.58**	-.41**	-.55**	-.35**	-.52**	-.43**
9.SoD	-	-	-	-	-	-	-	-	-	.31**	-.40**	-.51**	-.16*	-.40**	-.23**	-.43**	-.27**
10.FA	-	-	-	-	-	-	-	-	-	-	-.31**	-.36**	-.17*	-.39**	-.16*	-.32**	-.44**
11.CYRM	-	-	-	-	-	-	-	-	-	-	-	.91**	.86**	.61**	.30**	.58**	.55**
12.PR	-	-	-	-	-	-	-	-	-	-	-	-	.57**	.60**	.29**	.63**	.48**
13.C/RR	-	-	-	-	-	-	-	-	-	-	-	-	-	.46**	.22**	.38**	.49**
14.MSPSS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.81**	.78**	.78**
15.FamS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.41**	.51**
16.FriS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.38**
17.SigS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Level of significance: $p < 0.05^*$, $p < 0.01^{**}$, $p < 0.001^{***}$

Note: (SISRI = The Spiritual Intelligence Self-Report Inventory, CET= Critical Existential Thinking, PMP= Personal Meaning Production, TA= Transcendental Awareness, CSE= Conscious State Expansion, DAS= Death Anxiety Scale, ToD= Thought of Death, DR= Death Representation, SoD= Subject of Death, FA= Future Anxiety, CYRM = Child Youth Resilience Measure, PR= Personal Resilience, C/RR= caregiver/relational resilience, MSPS= Multidimensional Scale of Perceived Social Support, FamS= Family Support, FriS= Friend Support, and SigS= Significant other support).

Table 3: Multiple Hierarchical Regression for Moderating Role of Social Support between Death Anxiety and Resilience (N=150)

Variables	Resilience			
	R ²	B	β	95% CI
Step 1 (Control Variables)	.08**			
Age		-4.65*	-.17	[-8.99, -.31]
Marital Status		-5.37**	-.24	[-8.98, -1.76]
Socioeconomic Status		-1.94	-.09	[-5.20, 1.33]
Step 2	.41**			
Social Support		.39**	.64	[.30, .48]
Step 3	.52**			
Spiritual Intelligence		.20**	.37	[.14, .27]
Step 4	.53**			
Spiritual Intelligence_X_Social Support		.002	.41	[-.004, .01]
Total R ²	.51**			

Level of significance: $p < 0.05^*$, $p < 0.01^{**}$, $p < 0.001^{***}$

Note: Control Variables = age, marital status & socioeconomic status,

Table 4: Comparison between Male and Female Sample on Death Anxiety Resilience and Social Support (N=150)

Variable	Male (n = 73)		Female (n = 77)		p-value	95%CI	
	Mean	SD	Mean	SD		LL	UL
Death Anxiety	34.18	11.38	42.23	9.33	0.00***	-11.41	-4.71
Resilience	72.71	8.15	66.09	6.64	0.00***	4.23	9.01
Social Support	68.96	12.78	61.08	12.54	0.00***	3.80	11.97

Level of significance: $p < 0.05^*$, $p < 0.01^{**}$, $p < 0.001^{***}$

DISCUSSION

the aim of current study is to study the relationship of death anxiety with resilience among patients with CKD. This study also explores the role of social support as the moderator. The results of the current study indicated that death anxiety has significant negative correlation with resilience as well as with social support.

CKD is a leading health threat globally. It is also a cause of different physical and mental illnesses². So, Patients with chronic diseases such as CKD mostly suffering from death anxiety, and it also act as a barrier to treatment and diet adherence⁴. Death anxiety also consider as a main component to develop mental health problems in such patients. In this study the focus is to find out how

death anxiety related to resilience of patients suffering from CKD^{5,6}.

The results of correlation analysis shown explain that there is a negative relationship between death anxiety and resilience among patients of CKD. The regression analysis also shows that death anxiety significantly and negatively predicts resilience was supported by already conducted studies. There is a negative relationship between spiritual well-being and death anxiety. The resilient person can think positively, can easily control negative emotions, and have self-confidence^{16, 17}.

Previous studies have reported a negative relationship of high social support with rate of incident of disease and death^{18, 19}. The reason is that social support helps a person to improve their physical as well as mental health¹⁸. Studies conducted in Pakistan among the patients with chronic diseases and the findings of these studies claim that social support is very essential component for chronic disease patients to adapt the life-threatening illnesses¹⁸⁻²⁰. Social support played an important role in rapid recovery in patients with hemodialysis. There is a negative relationship between death anxiety and social support as social support helps in reducing the level of death anxiety and enhances the recovery course of chronic patients²⁰.

Gender based as male patients score higher on the scales of resilience and social support as compared to female patients. Previous study proved that men had more trait resilience than women because women are supposed to be submissive, dependent on men or family, and have less sense of control, which makes them less resilient²¹. Social support significantly moderate between death anxiety and resilience. The interaction of death anxiety and social support was found significant for resilience and if such moderator can be explored, it will help in addressing proper treatment to cope fear of death²².

The sample size of the study was small and demographic data should also be considered in analysis.

CONCLUSION

The results of current study revealed that there is a negative relationship between death anxiety and resilience. Social support significantly moderates

the relationship between death anxiety and resilience. Male patients have high level of resilience and social support as compared to female patients. While, female patients have high level of death anxiety as compare to male patients. Patients with middle socio-economic status show high score on the scales of resilience and social support and patients with upper socio-economic status show high score on death anxiety.

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