

## EXAMINING STRESS LEVELS AND EMOTIONAL CONTROL AMONG CARERS OF CHRONIC KIDNEY DISEASE PATIENTS

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### ABSTRACT

This study examines the complex dynamics of caregiving among family members of elderly hemodialysis patients, focusing on demographic predictors, coping mechanisms, stress levels, and emotion regulation. Marks (1996) and Pillemer & Suito (2006) identified various demographic factors influencing the likelihood of becoming family caregivers, while Carter (2003) highlighted the initial challenges and stress faced by caregivers due to lack of preparation and support. Martire et al. (2006) and Soskolne et al. (2007) found correlations between accurate perception of care demands, duration of caregiving, and stress levels. Coping mechanisms, although not formally assessed, appear effective based on indirect observations. Emotion regulation, measured using the Emotion Regulation Questionnaire, showed a significant correlation with stress levels, consistent with Lazarus & Folkman's (1984) appraisal theories. Notably, faith emerged as a significant coping factor, particularly among Muslim caregivers, indicating resilience in the face of illness and death. However, the study did not delve into the specific coping mechanisms employed, suggesting avenues for future research. The study concludes with significant correlations found between demographic characteristics, stress, and emotion regulation.

**Keywords:** stress levels, emotional control, chronic kidney disease patients

### INTRODUCTION

Illness is never an isolated life event. The patient and family must deal with changes resulting from illness and treatment. The patient and family commonly experience behavioral and emotional changes, as well as changes in roles, body image, self-concept, and family dynamics. Environment, personal behaviors, plays an interactive role in illness and health. The health care professional can no longer focus only on physical functioning since such situations can lead to stress and conflicting responsibilities, in care giving of patient with chronic kidney disease (Sandra, 2003).

#### 1.1 Chronic Kidney Disease

Chronic kidney disease is a progressive and irreversible disease causes destruction of the kidneys. Kidneys are an essential part of your body. They have a number of functions:

The two main causes of chronic kidney disease are diabetes and high blood pressure, which are responsible for up to two-thirds of the cases. Diabetes happens when your blood sugar is too high, causing damage to many organs in your body, including the kidneys and heart, as well as blood vessels, nerves and eyes. High blood pressure, or hypertension, occurs when the pressure of your blood against the walls of your blood vessels increases. If uncontrolled, or poorly controlled, high blood pressure can be a leading cause of heart attacks, strokes and chronic kidney disease. Also, chronic kidney disease can cause high blood pressure (National Kidney Foundation, 2011).

Some caregivers experience constant anxiety related to problems at work, conflict with a friend or another relative, or a situation with a child. Chronic worriers are subject to greater generalized stress. Even experienced caregivers may worry about caregiving,

although we understand there is nothing more we can do, and we may have trouble admitting that we need support.

Caregivers are at a greater health risk than the care receivers because when the caregivers devote themselves to the needs of someone else, they tend to neglect their own needs. They may not recognize or may ignore the signs of illness, exhaustion or depression that they are experiencing. Stress may negatively impact on the physical health of the caregiver or cause the caregiver to be physically or verbally aggressive towards the care receiver. Studies have also shown that one reason for elder abuse and neglect is caregiver stress ( Gupta & Chaudhuri, 2008).

In a study by Armstrong (2001) caregivers caring for very forgetful patients perceive their burden as being higher than caregivers who care for patients with mild forgetfulness. Also in another study, caregivers' interpretations of the situation appeared to have a more significant impact on the well-being of the caregiver than did objective characteristics of the experience Roscoe et al (2009). Scholars have also opined that the behaviours and attitudes expressed by the care receivers can influence the caregiver's stress Faison et al (1990). The elderly sometimes focuses exclusively on him or herself and try to use power, pressure, influence or control in ways destructive to their relationship with their caregivers. To some extent, the elderly person's behaviour can be self-centred and not noticing other people feelings and not realizing when they are upset or when something you do upsets them. Occasionally, the elderly develop abusive behaviour. In this regard, they complain bitterly about unavoidable situations, finding faults with almost everything, blaming others for problems caused by themselves, refusing advice that would ease care tasks because they think that they know better and their ideas should be carried, prolonging conversations through repetition and demanding help beyond the caregiver's capacity. This invariably may induce stress. Educational attainment, unemployment, gender and religiosity have also been shown to influence caregiver stress.

### **Theoretical orientation of Caregiver Stress**

Scholars have tried to provide an understanding of the relationship between caregiving and stress. The first of such theoretical orientation is attachment theory. According to the primary attachment

relationship is the child-parent relationship, generally, the child-mother relationship. Other primary and secondary attachment relationships are formed with the father, siblings, grandparents, and friends. The significance and durability of these relationships crystallize into personal bonds. The attachment figure provides proximity, a secure base which enables the attached person to engage in other activities with confidence and a safe haven in times of distress. Therefore, the degree of attachment between a caregiver and a care receiver can determine the amount of stress that will be experienced by the caregiver. Another theoretical perspective is the social exchange theory which proposes that social behavior is the result of an exchange process. The purpose of this exchange is to maximize benefits and minimize costs (Ainsworth & Bowlby, 1991). According to this theory, people weigh the potential benefits and risks of social relationships. When the risks outweigh the rewards, people will terminate or abandon that relationship. Therefore, if the caregiver is feeling that the demands of caregiving far outweigh the rewards, and then stress may likely set in. Hollis-Sawyer, 2001 is of the view that individual differences and not necessarily attachment or cost and benefits of a relationship are more important contributory factors in understanding issues that occur during caregiving.

Also Geister (2005) in a study in Germany found that many daughters who care for their parents do so as a moral duty and because of feeling or responsibility and not necessarily as a result of attachment relationship or what they hope to gain from the relationship.

In the Dialysis center of District Hospital Chitradurga, nearly 50-60 patients with chronic kidney disease, visit along with their caregivers for frequent hemodialysis and 3-4 get hospitalized for close monitoring.

Though there is significant high level of stress among care givers of hemodialysis patients and the research studies were very few, further research studies are needed to evaluate and determine the level of stress especially among the caregivers. Also the caregivers are lagging behind in terms of knowledge of coping strategies to combat with increasing stress.

Caregivers who can be flexible and feel more in control have a much lower sense of stress. Understanding the stress you are feeling will help you manage your responsibilities. Seek help from

family and friends to accomplish specific tasks or provide companionship for your relative/partner. Individuals can find great relief by talking, having a good cry, and getting any issues off their chest. Finding a support group that shares your experiences is an essential component to prevent chronic stress (Sandra, 2010).

A large and growing body of research reveals that providing care for a chronically sick person can have harmful physical, mental, and emotional consequences for the caregiver. As families struggle to care for others, their own health is put in danger. As a result, caregiver health is quickly becoming a public health issue that requires more focused attention from health professionals, policy makers and caregivers themselves to ensure the health and safety of those individuals dedicating their lives to the care of others.

### **Emotional Regulation**

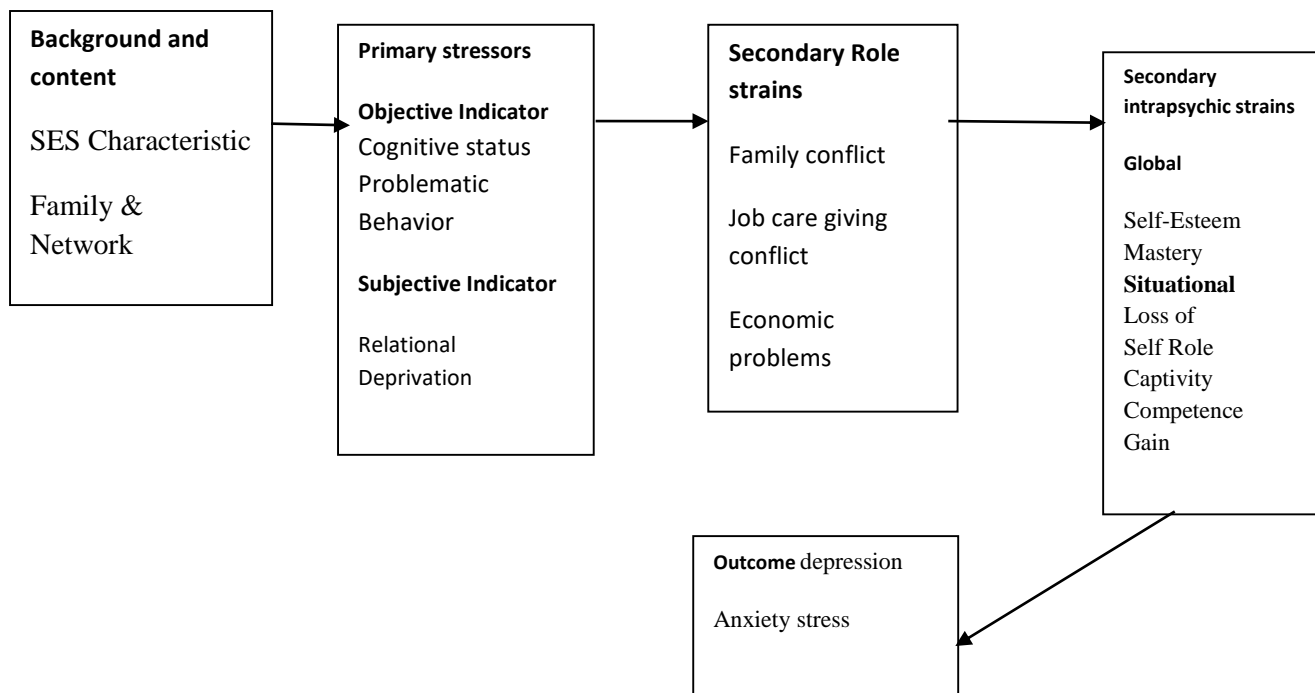
Regulation of emotion is the ability to respond to the ongoing demands of experience with the range of emotions in a manner that is socially tolerable and sufficiently flexible to permit spontaneous reactions as well as the ability to delay spontaneous reactions as needed. It can also be defined as extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions. Emotion self-regulation belongs to the broader set of emotion-regulation processes, which includes the regulation of one's own feelings and the regulation of other people's feelings (Gross & John, 2003).

### **Stress Process Model**

Pearlin and colleagues developed the stress process model, a highly influential model that evolved out of his theory on role strain (Pearlin, 1989, 1999; Pearlin, Mullan, Semple, & Skaff, 1990). Pearlin's model, and others like it, propose that caregiving is a stressor which, if appraised as a burden, can result in psychological distress. Caregivers may develop secondary role strains if their caregiving responsibilities conflict with other family roles (Lawton, Rajagopal, Brody, & Kleban, 1992; Pearlin et al., 1990).

The extra demands potentially put individuals at risk of ill health. The impact of caregiving, however, is influenced by a variety of context variables such as age, gender, socioeconomic status, relationship to the care recipient, social support, coping behaviors, and culture (Aranda & Knight, 1997; Lawton, Kleban, Moss, Rovine, & Glicksman, 1989; Pearlin et al., 1990).

According to Pearlin, caregiver stress as a consequence of a process comprising a number of interrelated conditions, including the socioeconomic characteristics and resources of caregivers and the primary and secondary stressors to which they are exposed. Primary stressors are hardships and problems anchored directly in caregiving. Secondary stressors fall into two categories: the strains experienced in roles and activities outside of caregiving, and intrapsychic strains, involving the diminishment of self-concepts. Coping and social support can potentially intervene at multiple points along the stress process.



(Pearlin, 1999; Pearlin, Mullan, Semple, & Skaff, 1990)

### Literature Review

Reviewing the existing literature is a critical step in the research process. It helps to develop an insight into the area of investigation and direct the researcher to develop a plan and gives strong foundation base. Hence the researchers reviewed the studies related to stress of caregivers.

### Researches on Caregiver stress

Anderson, Williams, and Gibson (2002) in a meta-analysis of caregiving research for a period of 20 years found significant racial or ethnic differences in the caregiving context. For example, Whites or Caucasians were more likely than Blacks or African Americans to utilize only immediate family in caregiving and received more social services. Furthermore, Black or African Americans had more members in their caregiving networks, were more likely to include friends and neighbors as resources, and were more likely to share caregiving responsibilities than were White or Caucasians. Black or African American CGs are also less likely to invoke formal supports than their White or Caucasian counterparts (Miller & Guo, 2000).

Cross sectional study on effect of illness on the family and female spouse of Chronic Kidney Disease patients on hemodialysis, conducted at St. John’s Medical College Hospital on thirty female

spouses. Family burden scale and anxiety scale were used to quantify the burden and anxiety. Family burden was rated as severe by 96.7% and the inter correlation matrix in the sub domains of family burden namely financial burden, disruption of routine activities, family physical health, disruption of family interactions and total burden when analyzed, reached statistical significance at  $P < 0.05$  for each of the characters. Anxiety of severe to moderate degree was reported by 80% of the subjects.

A growing body of research shows that stress level is affected by how we feel about being a caregiver. There is strong consensus that societal expectations and attitudes influence our thinking. Often we are not even aware of our own personal rules and expectations that may guide our behavior and influence our attitude toward caregiving (Sandra, 2010).

The elderly population is expanding and placing increasing strain on the health care system. About 40% of the U.S. population >60 years of age has CKD. And, the number of elderly patients who receive ESRD treatment has been rapidly increasing. Currently, nearly one in five prevalent ESRD patients are of age 65–74, and 16% are of age 75 or older. These numbers can be expected to increase further as the population ages; it is projected that the

number of individuals >65 years will increase from 35 million in 2000 to 70 million in 2030 (Gayomali & Sutherland, 2008).

### **Researches on Emotion Regulation of Caregiver and Stress**

A study on support interventions for caregivers of people with chronic kidney disease, a systematic review, West mead Center of Kidney Research, showed that a growing number of patients with Chronic Kidney Disease, rely on non-professional healthcare providers, such as family and friends, to manage their long-term condition throughout the trajectory of Chronic Kidney Disease. These informal caregivers can experience stress, depression, lack of confidence and poor quality of life. Yet, the needs of caregivers are often neglected and under-prioritized. The provision of information improved caregiver's knowledge (Sansbury, Craig 2006). All of these researches indicate that there is a relationship between various factors of care giving and stress.

Although a vast number of studies have examined the influence of care recipients' impairment (e.g. physical, cognitive, and behavioral problems) and the associated demands on caregivers' psychological and physical morbidity (see Pinquart & Sorensen 2003a, 2003b; Schulz, O'Brien, Bookwala, & Fleissner, 1995), few studies have examined the role of care recipients' suffering on caregiver emotions (Schulz, et al., 2009; Schulz, et al., 2008). There are, however, studies that have examined associations between individual components of suffering (psychological distress, physical symptoms, and existential/spiritual distress) and caregivers' emotions. Here we review these studies.

Steven D. Weisbord, Linda F. Fried, et al (2005), Prevalence, severity and importance of physical and emotional symptoms in chronic hemodialysis patients and their caregivers. This study sought to assess symptoms and their relationship to quality of life and depression. Dialysis symptom Index was used to assess the presence and the severity of 30 symptoms. A total of 162 patients from three dialysis units were enrolled, the median number of symptoms was 9.0 (interquartile range 6 to 13). Dry skin, fatigue, itching, and bone/joint pain each were supported by  $\geq 50\%$  of patients. Seven additional symptoms were reported  $>33\%$  of patients. 16 individual symptoms were described as

being more than "somewhat bothersome". Overall symptom burden and severity were correlated directly with impaired quality of life. And depression, physical and emotional symptoms are prevalent, can be severe, and are correlated directly with impaired quality of life and depression in maintenance hemodialysis patients.

### **Researches on Demographic Characteristics of Caregiver and Stress**

Marks (1996) indicated that the demographic variables of gender, age, marital status, duration and employment status, and education could be used to predict which participants were more likely to become family caregivers. However, in another study, it was found that gender, duration of caregiving, living proximity to care receiver, and unemployment status were predictors while family status such as being married or having children and level of education were not found to be predictors in this study (Pillemer & Suitor, 2006). There is a need for more consistent family caregiving research based on sound theoretical approaches.

Despite the growing number of elderly patients with end-stage renal disease who need support, there are few studies about their caregivers. The objective of this study is to describe caregivers' characteristics and evaluate their burden and quality of life. Researcher studied caregivers of elderly patients (>65 years) on hemodialysis (HD) therapy (n=84), on peritoneal dialysis (PD) therapy (n=40), and a group of caregivers (n=77) of nonelderly HD patients. Results indicates The majority of caregivers of elderly patients on HD or PD therapy were women, married, white, and a spouse, son, or daughter of the patient. Median numbers of hours of care per week were 70 (range, 14 to 148 hours) and 56 (range, 35 to 148 hours) for HD and PD patients, respectively. Seventy percent of caregivers of elderly patients on HD therapy and 60% of caregivers of patients on PD therapy used some medication regularly and had gone to a physician at least once in the last 6 months. Mean age of elderly patients was 72.5 years (range, 65 to 85 years) (Anglica et al, 2005).

They may have done this by taking an active interest in their parent's well-being or preparing his or her household prior to a need of active caregiving in hopes that they would become the primary caregiver. This also may have caused other siblings not to take as much of an active role in caregiving as

they may feel they were not as needed (Albert, 1990). Other adult children have reported stepping into the caregiver role out of a sense of duty felt toward a parent (Walker, Pratt, Shin, & Jones, 1990).

Burr and Mutchler (1999) found in a study of African American adult children caregivers ( $n=353$ ) and Caucasian adult children caregivers ( $n=1,180$ ) that African American adult children had stronger beliefs of filial responsibility. Further Burr and Mutchler (1999) found that African American adult children caregivers were significantly more likely to respond that they felt it was their filial responsibility to take a parent into their home and also to provide financial assistance to a parent who was in need. These findings are consistent with Connell & Gibson's (1997) research of ethnicity and sense of filial responsibility discussed previously.

The proposed study will compare adult caregivers and spousal caregivers on stress and coping behaviors to gain clarification presented in previous research such as Kang's (2006) finding of how adult child and spousal caregivers do not differ significantly on emotional strain but adult child caregivers cope better.

Although it is noted by Cantor (1983) and Kang (2006) that adult child caregivers and spousal caregivers do not differ on stress, research indicates evidence that physical health and social support is less for spousal caregivers than adult child caregivers (Kang, 2006; Pearlin et al., 1981).

### **Gender Caregivers**

Research has indicated that women emotionally, financially, and socially experience caregiving differently than men. It has been found that women were more emotionally invested in caregiving and women had more variation in their perception of caregiver burden on a day-to-day basis (Koerner & Kenyon, 2007). Also, research indicates that women are in better physical health and maintained higher levels of socialization outside of caregiving (DiBartolo & Soeken, 2003). However, men were more satisfied with the role of caregiving than women (Broe et al., 1999; DiBartolo & Soeken, 2003; Ekwall & Hallberg, 2007).

Ekwall and Hallberg (2007) noted that men were more likely to be experiencing caregiving for the first time compared to women and therefore, experienced more personal growth in the role of family caregiver than women caregivers. This was consistent with findings from Collins and Jones (1997) who reported

that men experience greater purpose in life through family caregiving than women. In addition, it appears men and women differed in coping with family caregiving.

### **Researches in Pakistan**

This cross-sectional study was conducted on patient maintaining hemodialysis for more than 3 months at 3 dialysis centers of Lahore. Fifty healthy individuals were included as controls from among the patients' caregivers. The QOL index was measured using the World Health Organization QOL questionnaire, with higher scores corresponding to better QOL of patients. Eighty-nine patients (71.2%) were men, 99 (79.2%) were married, 75 (60.0%) were older than 45 years, and 77 (61.6%) were on dialysis for more than 8 months. Patients on hemodialysis had a poorer QOL as compared to their caregivers in all domains except for domain 4 (environment). There was no difference in the QOL between the three dialysis centers of the study, except for domain 3 (social relationship) of the patients at Mayo Hospital (a public hospital), which was significantly better. Nondiabetic patients had a better QOL in domain 1 (physical health) as compared to diabetic patients. Duration of dialysis had a reverse correlation with the overall QOL.

### **Aim of the Study**

Family caregiving offers many rewards, but also places unique challenges on caregivers in terms of psychological symptoms such as increased stress, anxiety, and depression. Caregivers also experience behavioral symptoms that affect physical health such as poor nutrition and decreased physical activity (Del Campo et al., 2000; National Center of Elder Abuse, 2002). Caring for an elderly family member demands a significant amount of energy from the caregiver placing them at risk for physical and mental health decline as a result from the stress of caregiving (Haley et al., 2004; Proulx & Snyder, 2009). Previous research has indicated that negative effects of family caregiving can be decreased with social support and positive coping behaviors such as problem-focused strategies (e.g., reading about the disease process of the care receiver, Ekwall & Hallberg, 2007).

### Hypotheses

- There is likely to be a relationship between duration of care giving and stress of Caregivers.
- There is likely to be a relationship between socioeconomic status and stress among caregivers of patient with Kidney disease.
- There is likely to be a relationship among stress and family system of caregivers.
- There is likely to be a relationship between duration of caregiving and emotion regulation of caregivers.
- There is likely to be a relationship between Stress of the caregivers and Emotion Regulation.

### Method

Caregiving is an ongoing process and effects in many ways to mental and physical health of the caregivers. This study was quantitative in nature and conducted to find out the relationship of demographic characteristics, emotional regulation and stress levels among caregivers of elderly Hemodialysis patients.

### Research Design

The study was Correlation in nature. Ex-Post Facto Research Design was implemented. The data for the study was taken from a cross section of the population at one specified time to study a specific phenomenon.

### Sample

Purposive sampling was used. Total sample was comprised of 60 caregivers of Elderly Hemodialysis patients. Care givers of elderly hemodialysis patients (only those caregivers were taken who providing care-giving to patients with age 55 years or are above). An additional criterion was that all the recruited caregivers must have lived exclusively with the patient for at least 6 months prior to their recruitment for the present study. Caregivers were also specified on the basis of caregiving duration. Caregivers of other medical and physical illnesses were excluded.

### Measures

#### Kingston Caregiver Stress Scale [KCSS] (Kilik & Hopkins, 2010)

The Kingston Caregiver Stress Scale developed by Kilik and Hopkins (2010) is primarily a scale used to

monitor change in a family caregiver's stress level over time. The scale is designed for community living lay caregivers, not institutional care staff. Some caregiver stress scales try to determine how much stress caregivers "should" be experiencing by assigning stress values to caregiving activities. There is evidence that these group scores do not correlate well with how much stress an individual caregiver experiences. Also, the score for one person probably does not mean the same thing as the same score for another. The KCSS takes a more direct approach by asking how much stress the caregiver feels. The scale should be used to monitor change in an individual caregiver's stress over time.

#### Emotion Regulation Questionnaire [ERQ] (Gross & John, 2003)

Emotion regulation questionnaire (ERQ) was developed by Gross and John in 2003. The ERQ is self-report measure developed to assess the use of two emotion regulation strategies:

#### Cognitive Reappraisal and Expressive Suppression

The present study was use 10 item version, yielding two subscales: Cognitive Reappraisal (Seven Items), Expressive Suppression (Three Items). Items are rated on a seven-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*) (add emphases), with mean scores computed for all subscales in order to ensure similar scaling for comparison. The higher score on ERQ depicted that individual has a good control on his or her emotions. The ERQ has been shown to have good test-retest reliability (.69) and high internal consistency (.79 reappraisal, .73 suppression) (Efkatheri, 2009).

#### Procedure

The topic of the study was discussed with the supervisor and after approval of the title the study was conducted. The measures used in the study were translated and back translated in Urdu from professional clinical psychologists (who have completed Advanced Diploma in Clinical Psychology and have more than 7 years of clinical experience). The data of the present study was collected from the dialysis departments of Ittefaq Hospital, Sheikh Zayad Hospital, and Akram Medical Complex. Permission letters were got signed from the concerned hospital authorities for collecting research data (see Appendix A). The participants of the study were caregivers of elderly

Hemodialysis patients. In the beginning Information Sheet was given to the participants and their consent was obtained. Afterwards questions were asked from the caregivers and recorded on the answering sheets by the researcher based on demographic questionnaire, stress and emotion regulation scales. The details of the participants collected from different hospitals is given in (see Appendix B).

**Results**

Demographic questionnaire was used to collect basic information about caregiver’s age,, duration of caring for hemodialysis patients, caregiving in hospital or in home or both, gender, marital status, highest level of education, family system, No of

children, socio economic status and occupation. Relation to care recipient was asked with the following responses: spouse, child, sibling, other relative, friend, or other. The caregiver was asked about questions regarding his or her emotional and physical health status. The remaining items came from standardized measures with parametric data.

Demographic questionnaire was used to collect basic information about patient’s age, gender, marital status, highest level of education, family system, no of children, occupation, duration of illness, how many times in a week patient came for the dialysis, and stage of illness. It’s a self developed questionnaire, after reviewing the existing literature. (see Appendix C).

**Table 1**

*Showing Frequency And Percentages of The Sex Of Caregivers Of Elderly Hemodialysis Patients (N=60)*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	37	61.7	61.7	61.7
	Male	23	38.3	38.3	100.0
	Total	60	100.0	100.0	

Table 1 showing the frequency and percentages of the sex of caregivers of elderly hemodialysis patents. Table shows that from the total sample of n=60, 37

comprises of female with percentage of 61.7 %. The total number of male participants is 23 of n=60 showing 38.3 %

**Table 2**

*Showing The Caregivers Type of Relation With Patient (N=60)*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Wife	18	30.0	30.0	30.0
	Husband	8	13.3	13.3	43.3
	brother	1	1.7	1.7	45.0
	Sister	7	11.7	11.7	56.7
	daughter	15	25.0	25.0	81.7
	Son	11	18.3	18.3	100.0
	Total	60	100.0	100.0	

Table 2 showing the kind of relationship of the caregivers with elderly hemodialysis patient. The table depicts that overall 18 participants were wives of the patients with percentage of 30. Where as the

second leading relation is of daughters comprising of 25% of the total population. The third leading category of caregiver is of son showing 18% of the total sample population.

**Table 3**

*Showing Frequency And Percentages Of Age Ranges Of Caregivers Of Elderly Hemodialysis Patients (N=60)*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-35	19	31.7	31.7	31.7
	35-50	29	48.3	48.3	80.0
	50-65	11	18.3	18.3	98.3
	7.00	1	1.7	1.7	100.0
	Total	60	100.0	100.0	



Table 3 showing age ranges of the caregivers of the elderly hemodialysis patients and mostly fall between 35 to 50 years of age.

**Table 4**

*Showing Frequency And Percentages Of The Education Level Of The Caregivers Of Elderly Hemodialysis Patients*

	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Illiterate	6	10.0	10.0	10.0
less then primary	1	1.7	1.7	11.7
primary	5	8.3	8.3	20.0
middle	3	5.0	5.0	25.0
Valid matriculation	11	18.3	18.3	43.3
intermediate	13	21.7	21.7	65.0
bachelors	11	18.3	18.3	83.3
masters	7	11.7	11.7	95.0
technical diploma	3	5.0	5.0	100.0
Total	60	100.0	100.0	

Table 4 showing the education level of the participants caregivers and table revealed that the mostly caregivers were educated uptill intermediate.

**Table 5**

*Showing Family Monthly Income Of The Caregivers Of Hemodialysis Patients N=60*

	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
5001-10000	1	1.7	1.7	1.7
10001-20000	18	30.0	30.0	31.7
20001-50000	24	40.0	40.0	71.7
Valid 50001-1000000	10	16.7	16.7	88.3
more then 1000001	6	10.0	10.0	98.3
7.00	1	1.7	1.7	100.0
Total	60	100.0	100.0	

Table 5 showing the monthly income of the participants caregivers and it depicts that the mostly caregivers falls within the range of 20001 to 50000.

**Table 6**

*Showing Marital Status of The Caregivers Of Hemodialysis Patients(N=60)*

	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Unmarried	18	30.0	30.0	30.0
Valid Married	41	68.3	68.3	98.3
seperation/divorce	1	1.7	1.7	100.0
Total	60	100.0	100.0	

Table 6 shows that 68.3 % of the participants were married and 30% of the caregivers were unmarried.

**Table 7**  
*Showing Family System Of The Caregivers (N=60)*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Joint	20	33.3	33.3	33.3
	nuclear	40	66.7	66.7	100.0
	Total	60	100.0	100.0	

Table depicts that of the total population 67% participants belongs to nuclear family system where as 33.3 % belongs to the joint family system.

**Table 8**  
*Showing Residence Of The Caregivers (N=60)*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	City	49	81.7	81.7	81.7
	village	11	18.3	18.3	100.0
	Total	60	100.0	100.0	

Table shows that most of the caregivers belong to city where as only 18% of the population sample belongs to rural areas.

**Table 9**  
*Relationship Between Total Scores Of Emotion Regulation Questionnaire And Kingston Caregivers Stress Scale*

		ERQ Total	KCSS Total
ERQ Total	Pearson Correlation	1	-.420**
	Sig. (2-tailed)		.001
	N	60	60
KCSS Total	Pearson Correlation	-.420**	1
	Sig. (2-tailed)	.001	
	N	60	60

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

Table 4.4. Showing the negative relationship between the total scores of Emotion Regulation Questionnaire and its relationship with scores of Kingston Caregivers Stress Scale.

**Discussion**

Marks (1996) indicated that the demographic variables of gender, age, marital status, duration and employment status, and education could be used to predict which participants were more likely to become family caregivers. However, in another study, it was found that gender, duration of caregiving, living proximity to care receiver, and unemployment status were predictors while family status such as being married or having children and level of education were not found to be predictors in this study (Pillemer & Suito, 2006).

At the beginning of the illness although the family member caregivers have no idea how to carry out their caregiver role, how much care the patient needs and how to use current resources as they usually feel unprepared, have inadequate information regarding the disease and the care required and have limited support from health care givers. As a result, they neglect their own health and portray inadequate coping reactions they also experience more level of stress. (Carter, 2003).

Martire et al (2006) found that spouses who were more accurate in their perceptions of their partners' level of pain during a pain eliciting log-carrying task reported less stress from providing support and assistance and have more control over their emotions. The results of the present study also shows positive correlation between emotion regulation of the caregiver and duration of caregiving

Soskolne et al, 2007 examined spouses and adult children as caregiver and found that caregivers as a spouse or parent who have provided care since a long time may have adapted to the demands of caregiving over time. The results of the present study indicate negative correlation between emotion regulation and stress. It is revealed through above mentioned studies also the duration of caregiving has significant effect over level of stress and emotion regulation. In short with the passage of time of caregiving, a caregiver might develop good coping skills to handle the stress and to regulate the emotions.

Thus during the phase of caregiving coping plays an important role in dealing with the burden of caregiving. Coping is the process of managing requirements and difficulties caused by the individual's inner and outer world, expending cognitive and behavioral efforts to solve personal and interpersonal problems and seeking to control and reduce stress. The literature proves that caregivers of cancer patients use different coping strategies to cope with the difficulties they experience. (Redinbaugh et al ,2003; Kershaw et al 2004). However in the present study coping with stress mechanism is not assessed formally through any formal assessment tool. Thus the indirect observation and the information provided by most of the caregivers indicate that they have good coping mechanisms.

The level of Emotion Regulation of the caregivers in the present study was assessed by Emotion Regulation Questionnaire which measures cognitive reappraisal and emotional suppression. Appraisal theories are commonly used in the fields of emotion, emotion regulation, and cognitive ability to understand individuals' emotional reactions (Lazarus & Folkman, 1984). The central point of appraisal theories is that "the way we evaluate an event it determine our emotional reaction as well" (Lazarus, 1999 , p. 87). In other words, it is not a particular event that causes a particular emotion but, rather, it is a person's subjective appraisals of the event that lead to an emotional reaction. It reveals from the result as well that the individuals who have high emotion regulation strategies experience less stress level during caregiving. (Lazarus & Folkman, 1984 ; Ortony *et al* ., 1988 ; Scherer, 1988 ; Lazarus, 1991 ).

The most important factor which overall may affect the coping mechanism of an individual is

Faith. As the duration of illness increases the resilience of the caregiver also increases, the factor involved is Faith in Allah and on the process of dying. As being a Muslim we are invaded with this idea that we have to return back to Allah and this place is place of testimony. We have to build patience to face the hardships of life. As in Quran it is quoted that:

وَمَا لَنَا أَلَّا نَتَوَكَّلَ عَلَى اللَّهِ وَقَدْ هَدانا سُبُلًا وَلَنْصِبرِ  
عَلَىٰ مَا آذَيْتُمونا وَعَلَى اللَّهِ فليَتَوَكَّلِ الْمُتَوَكِّلُونَ ﴿١٢﴾

"And why should we not put our trust in Allah while He indeed has guided us our ways. And we shall certainly bear with patience all the hurt you may cause us, and in Allah (Alone) let those who trust, put their trust."

So Faith in Allah and on the phenomenon of death are major contributing factors which lead to handle stress and emotion regulation, However in the present study although we investigated the relationship of stress and emotion regulation of the caregivers but did not focus on the coping mechanism underlying these phenomena. This factor is although the limitation of the study however open doors for future investigation.

### Conclusion

The study was conducted to find out the relationship of Demographic Characteristics, Stress and Emotion Regulation of the Caregivers of Elderly Hemodialysis. Pearson Product Moment was run to analyze the data and significant correlation was find out.

### Limitations

- The conditions under which the scales administered were not ideal because distracting variables were not controlled, which might have affected the responses.
- During the time of data collection some of the caregivers was called by the doctors due to this their attention was diverted. The main cause of the refusal of participants was this distraction.

### Suggestion

- There would be certain suggestions to make to those who might wish to probe in this area. Suggestions in the light of above limitations are given for future researchers regarding betterment of the research work.
- This study will help to lay further grounds for researchers on Hemodialysis.
- This study provides directions for understanding various factors that can lead to stress..
- By knowing the factors that can lead to stress the relatives and health care professionals can take some preventive measures like giving lectures on hope and optimism and providing company to the patients.
- Through various means like media and educating the patients, the caregivers of the patients will be able to use coping strategies successfully in order to overcome their stress.

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