

Received : 25 January 2024, Accepted: 25 February 2024

DOI: <https://doi.org/10.33282/rr.vx9i2.18>

Self-Concealment and Psychosocial Well-being in Individuals with Epilepsy: The Mediating Role of Relationship Quality

Hafiz Muhammad Younas¹, Prof Dr Sadia Saleem², Muhammad Waqas³, Mavra Hafeez⁴, Hina Wahid Bukhsh^{5*}, Dr. Shama Mushtaq⁶.

1. Visiting lecturer GCUF Pakistan.
2. of Professional Psychology, Department of Clinical Psychology, University of Management and Technology, Lahore. Pakistan.
3. Lecturer superior college Kamalia, Pakistan.
4. University of Westminster, UK.
5. University of Agriculture Faisalabad, Pakistan.

Abstract

The current study aimed at investigating the relationship between self-concealment, quality of relationship, and psychosocial reactions in individuals with epilepsy. Epilepsy is a brain condition associated with persistent and repetitive seizures caused by abnormal neuronal electrical activity. Self-concealment is explained here as the proclivity to deliberately conceal personal information from others due the perceived painful or unfavourable. The sample for the current study was 89 (Men=53, Women=36) with the age range of (17-60) years ($M=34.26$, $SD=12.00$) diagnosed with epilepsy were selected through purposive sampling. The measures for the current study comprised Self-Concealment Scale (Javed & Jabeen, 2018), Quality of Relationship Inventory (QRI, Pierce et al., 1991), and Psychosocial Reactions in Epileptics Scale indigenously developed along with and a demographic Performa. To test main hypotheses correlation and mediation analysis was run. The results found significant negative

relationship among the factors of self-concealment, quality of relationship, and psychosocial reactions in people with epilepsy. The results of mediation showed that the conflict in relationship fully mediates in between self-concealment and psychosocial reactions in epileptics. Moreover, self-concealment and psychosocial reactions in epileptics are partially mediated by support and depth in a relationship.

Keywords: Epilepsy, self-concealment, quality, relationship, psychological reaction.

Introduction

Epilepsy is a brain condition associated with persistent and repetitive seizures caused by abnormal neuronal electrical activity (Thijs et al., 2019). Epilepsy has many non-medical effects on those individuals who are experiencing epileptic fits, on their families, and also on the community. Researches indicated that people who have epilepsy have significantly higher level of psychological adversity (Cummins, 2001). To control epilepsy, it has required a specialized neurologist with the latest knowledge to diagnose it and dictate treatment. A general practitioner who manages subprograms of medical care and community workers or clinical psychologists whose specialization in epilepsy can provide psychosocial support, information, and psycho-education to help in maintaining a good life.

Mostly experts, general practitioners, and clinical psychologists can work as team members to reduce the psychological and social impingement of epilepsy (Kanner, et al., 2012). It's a medical condition, but people with epilepsy may have to face some psychological and social consequence. In this study, we discussed that how people with epilepsy can be helped to cope with such consequences. Epileptic seizures are rapid episodes of signs and symptoms caused by excessive amount of synchronic activity in the brain.

Epilepsy is one of the most prevalent neurological illnesses, affecting around 50 million individuals globally, with almost 80 percent of sufferers living in developing countries (Fiest et al. 2017). About 70% of people with epilepsy, seizures are managed and controlled by regular treatment, but most people with epilepsy still have to fight the stain and securement due to uncertainty (World Health Organization, 2015).

In developed countries, the prevalence of this illness ranges from 2.3 to 15.9 per 1,000 people, whereas in poor and undeveloped countries, the prevalence ranges from 3.6 to 15.4 per 1,000 people (Bell et al., 2014). Currently, 1 in 100 people in Pakistan suffering from epilepsy

because they belong to under developing countries (Khatri et al., 2003). Another study showed a treatment rate of 38.4% (Durkin et al., 2003). It is claimed that more than 80% of people with epilepsy are living in developing country in stay undiagnosed or untreated (Bharicha, 2003).

The psychosocial significances of epilepsy and permanent epileptic conditions are more problematic than seizures. Many psychosocial impacts are contingent upon social, cultural, or personal factors. The Large Clinical Standards Advisory Group (CSAG) survey exhibited the extent of different areas of interest connected to age and severity of epilepsy. Common apprehensions for adults are driving bans, condensed work, and social functioning. Other problems are the incapability to participate in sports activities, the need to take pills regularly, sleep problems, the need to be controlled, and learning difficulties. From a psychological point of view, people with epilepsy suffer from memory impairment, low self-esteem, depression, and anxiety. Lack of probability of seizures is a major cause.

The other variable in this study was self-concealment. Self-concealment mostly is an interpersonal process (Uysal et al., 2012). We have a natural tendency to conceal bad or painful private information from others (Hagger & Riley, 2017). Self-concealment is explained here as the proclivity to deliberately conceal personal information from others due the perceived painful or unfavourable (Masuda & Boone, 2011). Here, the process of self-concealment, Uysal (2020), which is reflected as a special example of edge regulation on privacy, can also be seen inside self-expression or image management models where social interactions provide chances. Throw away painful or negative personal information (Bonnesen & Hummert, 2002). Self-concealment includes consciously concealing very bosom and negative personal information thoughts, feelings, actions, or events at the valence (Kelly, 2002).

Cruddas et al. (2012) define concealed personal information as comprising 3 aspects: it is personal and private, it is deliberately attainable, and it is hidden from public deliberately. Most people will confess that they deliberately hiding sensitive information about themselves or others. Many theorists argue that withhold such kind of information increase the risk of mental and physical well-being. Research has shown that some people have great difficulty with their abilities to express and reveal personal thoughts and feelings. Although shame and stigma have long been recognized as common bases of hiding information about what is happening in one's mind (Kissane et al., 2013).

Self-concealment is a known as social practice. Most individuals have irritated sentiments, thoughts, and knowledge about themselves that they are unable to communicate with others (Pohl et al., 2021). These secrets can range from slightly rough to very painful. Sometimes these mysteries are passed on to only one or two people, and sometimes not to only a single person at all (Russell, 1986). Clinical experience, research, and casual observations reveal that some people are more veiled than others, and the most painful or traumatic events are frequently concealed (Wismeijer et al., 2009).

Quality of relationship refers to the degree to which an individual feel positively or negatively about his or her relationship (Morry, et al., 2010). That is an evaluation of a person's relationship that includes interpersonal understanding and attention emphasis. This involves observing a person's interactions or patterns of engagement, as well as comparisons and inequalities between members in a relationship. It also requires introspection and deliberate analysis on individual connections (Acitelli, 2008).

Problem statement:

After reviewing all these constructs and understand the consequence of theme, it was decided to test the quality of the relationship of epileptics in Pakistani culture concerning their psychological and social issues. To test how self-concealment effect on the quality of relationship and how both variables play role in psychosocial reactions in the life of people with epilepsy (PWE).

Objectives of the Study

- To explore psychosocial reactions of individuals with epilepsy.
- To examine the consequences of self-concealment on quality of relationships in PWE.
- To inspect the impact of demographical variables (age, gender, marital status, education, and duration of problem) on psychosocial reactions of individuals with epilepsy.

Literature Review

Health psychology is the study of how biological, psychological, behavioral and social factors interact to each other to impact illness or well-being. Understanding the effects of illnesses on mental health is made easier by health psychology. During the 22nd International Convention

on Epilepsy with title “Out of the Shadows” in Dublin and Geneva in 1997, the World Health Organization (WHO), the International League Against Epilepsy, and the International Epilepsy Bureau came together for the first time in history and began a worldwide campaign against epilepsy. The goal of this research was to promote public and professional understanding about epilepsy, that is a widespread and curable brain illness (Theodore et al., 2006)

Several sorts of research from underdeveloped or developing countries have revealed that people in these countries have more negative views and shame about epilepsy than people in the developed world (Chung & Chang, 1995). Pakistan is in the same boat as the entire world. The overall prevalence of epilepsy in Pakistan is projected to be 10 per 1000 people, with early adulthood being the most vulnerable (Khatri et al., 2003). Epilepsy is twice prevalent in rural areas (14.8/1000) as it is in urban regions 7.4 persons from per 1000 individuals (Khan & Akhter, 2002). This pervasiveness of epilepsy in rural and remote areas emphasizes the need for further research into the condition, with a focus on diverse cultural, psychological and social factors to support in treatment and management.

The symptoms epilepsy is included, seizure occur suddenly as a result of unusually abnormal high neuronal activity in a cluster of neurons and the patient is gone into unconscious state of mind. The salivation starts to come out from the mouth with jury movements (Kanner et al., 2004). Diagnosis for epilepsy required at least two unprovoked seizures must occur within 24 hours (Benbadis, 2009).

People with epilepsy face a slew of psychological difficulties as a result of seizures. People with epilepsy are more likely to experience low self-esteem, anxiety, and sadness than people without epilepsy (Amtson et al., 1986). Patients with epilepsy have been found to have considerably greater levels of psychological discomfort, according to studies (Cummins, 2001). Sixty-seven percent of persons with epilepsy report increased levels of psychological distress (Elliott et al., 2009).

One of the factors that may help patients with epilepsy to cope up with difficulties is social support (Charyton et al., 2009). Poor mental and physical health have been linked to a lack of social emotional support and a low perception of the sufficiency of social assistance (Decker, 2007). In chronic medical diseases, such as epilepsy, perceived features of social support are crucial for regulating depressed symptoms (Vaux, 1985). Adults with epilepsy are more likely

to be underemployed or unemployed than the general population and have lower rates of marriage and social interactions (Coolings, 1990). Some persons with epilepsy, although not all, feel stigmatized by their illness (Scambler & Hopkins, 1986).

According to Hoppe & Elger (2011), up to half of the individuals with uncontrolled epilepsy suffer from depression. Lack of work, the existence of an underlying debilitating illness, and the epilepsy severity are all factors associated with depression.

These emotional reactions have an impact on more than just cognitive impairment. They also have an impact on social functioning. Because a person who suffers from seizures has very little command over how others react during seizures. They prefer being alone or reduce their social interactions. PWE have been observed to have low life satisfaction levels in the areas of work, mental peace, and other social interactions (Wiebe et al., 1999). According to a study done by Aziz and his colleagues (1997), in Pakistan, people with epilepsy have difficulty completing daily tasks and decisions taking about their marriages. But, fresh researches in the social areas are limited. Myths and prejudices about epilepsy persist (Bandstra, et al., 2008). Stigma and social isolation are common among PWE from many cultures, although they are more common in poorer nations and those with little social support (Elliott, et al., 2011).

A study in Pakistan reported that, PWE are not feel stigmatized, but their learning and marks are affected due to the epilepsy. They have difficulties completing daily tasks and making decisions about their marriages and making kids whether they should get married and plan for making kids or not (Sahar, 2012). Women were encouraged to perceive themselves as more harmful to others, get less assistance from their relatives, as well as to avoid relatives more frequently than males. Despite the fact that women married less frequently than men, women were much more inclined than men to feel that persons with epilepsy should not marry. Perception is might be affected by social and cultural forces, especially family influence. Because it is almost usually the parents' obligation to arrange a daughter's marriage (Akhtar et al., 1997).

A highly educated PWE has a lower level of stress for their educational planning, fewer kids, less avoidance of their neighbours and classmates, more socialize, and get married frequently than PWE having less education. The majority of respondents thought their epilepsy was caused by physical reasons just 3.1 percent thought it was caused by spiritual forces (Aziz et

al., 1997). The development of seizures corresponds with age, because ageing process itself may be a major potential risk factor for seizures. As a result, increasing aging can be linked to an increase in the rate of epilepsy (Beghi, & Giussani, 2018).

An investigation found a high male to female ratio, ranging from 2.4 to 3.1. (Khan & Akhtar, 2002). Epilepsy was most common in children under the age of 30. The highest epilepsy prevalence was observed between age range of 20-40 years. The frequency was lowest between the ages of 40 and 60. (Aziz et al., 1997). 32 percent of epilepsy patients have a positive family history of non-febrile recurring seizures, although this cannot be restricted (Aziz et al., 1994). Two families with numerous siblings were found in one paediatric research.

Clinical and demographic variables have an important role in epilepsy treatment. False beliefs, low socioeconomic status plays a significant impact in inadequate epilepsy treatment. Similarly, consanguineous marriages among people with a positive family history of epilepsy might raise the societal burden of epilepsy. It is widely established that the occurrence of epilepsy is connected to poor socioeconomic position, positive family histories of epilepsy, reduced access to the health care system, and environmental variables (WHO, 2001). According to statistics, those who are socioeconomically marginalized are more prone to epilepsy (Neligan et al., 2012).

Self-concealment has been related to poor mental health outcomes and immune function (Pennebaker & Beall, 1986). Lane and Wegner (1995) proposed that concealing a secret initiates a process known as the “preoccupation model of secrecy” which results in a deliberate suppression of thinking, resulting in an obsessive preoccupation with thought intrusion. This makes the concealed thoughts more accessible and making concealment more difficult. Concealing has a variety of physiological impacts, including increased physiological arousal and vulnerability to stress-related disease (Pennebaker & Chew, 1985). Indications of psychosis in young individuals who kept a family secret diminished once the secret was revealed. Furthermore, being able to share personal experiences, thoughts, feelings, and opinions with others is extremely beneficial to one’s mental health (Pennebaker, 1997). Indeed, exposing a secret may result in empathy and social approval for the secret-teller (Derlega & Grzelak, 1979).

Clinical practitioners have long recognized the consequences of self-concealment for health status. Ellenberger (1970) traces the historical significance of the “burdening” or “pathogenic” underground ideas in the advances in dynamic psychotherapy. The client's conscious secrets from the therapist, according to the psychoanalytically oriented therapist, indicate a type of purposeful and overt resistance that must be addressed (Drecun, 2005).

The analytically focused clinician's attention on client's most private and traumatic experiences as well as their problems in sharing them is not unique. Certainly, the therapist's job as a partner to whom the client may disclose his or her most private thoughts, emotions, and actions, is a distinguishing feature of the therapeutic relationship (Towbin, 1978). Work in the field of social support has revealed that having friends who are completely open to you has a good influence on your mental health. In a number of studies, the presence of friends affected health status and coping outcomes following stressful life events (Miller & Ingham, 1976). Emerging research shows that concealing traumatic events might have negative consequences on mental health for long-term (Pachankis et al., 2020).

In a number of studies, Pennebaker and Chew (1985) investigated and they uncovered concealed illness linkages or concentrated connections and discovered that they were unable to communicate their feelings and thoughts about traumatic events such as parental separation, spouse death, parent death, any chronic disease, and sexual disturbances lead to long-term mental health effects however when social aid is provided. Pennebaker (1985) argues that not communicating or confiding from another person about the experience may be more damaging than the incident itself. Individual variations or circumstances are linked to the difficulty or unwillingness to communicate major upheavals with the others (Pennebaker & O'Heeron, 1984).

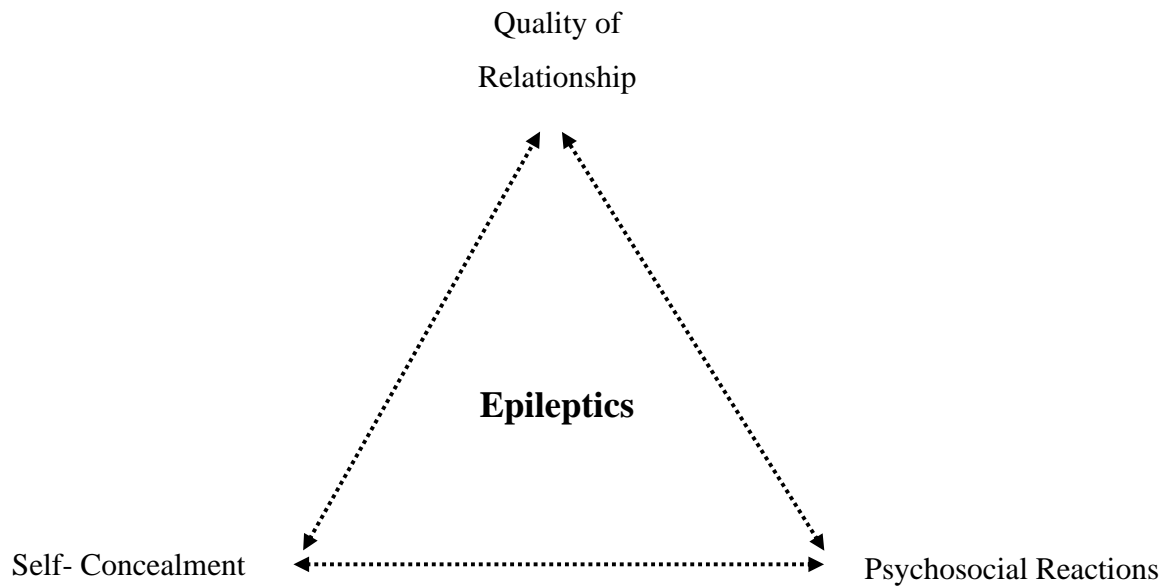
Females with epilepsy are less likely than males with epilepsy to disclose their illness to future spouses (Santosh et al., 2007). There were no gender differences in terms of age at onset, semiology, or frequency of seizures between men and women. Women with epilepsy had more comorbidities, lower employment, and a greater anxiety level than males with epilepsy. Females had a harder time finding life partners than males (Santosh et al., 2007). Women with epilepsy are more likely to divorce. Even though the clinical characteristics of their epileptic syndromes are equal, women with epilepsy have greater issues with marriage, mood, and work than males (Gopinath et al., 2011).

According to the US Centers for Disease Control and Prevention's Epilepsy Program (DCPEP), one in every five people with epilepsy lives alone, and less than one in every four lives in a family with two adults and children. Adults with epilepsy who live alone may be at a higher risk of harm due to uncontrolled seizures, emotional anguish due to social isolation, worse quality of life, and early death (Friedrich et al., 2015). Stigma influences attitudes about epilepsy as well as more personal life domains like intimacy and marriage. A number of researchers have reported that people with epilepsy PWE are less likely to marry, and those who are exposed to the stigma are substantially more likely to divorce than others (Tedrus et al., 2015).

Lower socioeconomic alone does not explain felt stigma, instead, symptoms of depression and a lack of social supports had the largest influence on reported felt stigma in people with epilepsy (Leaffer et al., 2014). Epilepsy can also affect cognition in various ways. PWE commonly report impairments in cognitive functioning, ranging from 44% for problems in learning and psychomotor impairment to 59% for drowsiness or fatigue (Meador, 2006).

Psychiatric illnesses are very common comorbidities in epilepsy, with one in every three persons 1:3 suffering from epilepsy having a history of them (Lin et al., 2012). For both medical and psychological factors, mood and anxiety disorders are the most commonly reported. The weight of stigma, social restrictions, and prejudice in epilepsy lead to demoralization and low self-esteem but the pathology of epilepsy as a whole is connected to mood disorders as proven by neuroanatomical and neurochemical theories (Tellez-Zenteno et al., 2007).

Hypothetical Model of the Study



Research Design

In the current study, the phenomenology method was used to explore the psychosocial reactions in epileptics, and the correlational research design was used to explore the relationship among the variables. The data for the current study was collected from outdoor patients' departments (OPDs) of psychiatry and neurology departments of different government and private hospitals in Punjab, Pakistan.

Measures

Demographic Sheet

Personal information was collected through the demographic sheet. It included the age of the participants, gender, education, marital status, duration of illness, and occurrence of the last seizure (Appendix F).

Self-Concealment

Self-Concealment Scale was used to measure self-concealment in epileptics. It consisted of 17 items which are alienated into two factors. F1: Fear of others and F2: Personal Attributes. Before using the scale permission was taken from authors (Javed & Jabeen, 2018). Each item has four levels 0(not at all), 1(a little), 2(quite), and 3(very much).

Quality of Relationship Inventory

Quality of Relationship Inventory (QRI) was used to measure the quality of relationship of epileptics with others. It is a self-report measure of perceived support depth and conflict in a relationship. It used to assess the particular relationship perceptions of societal support, which consists of people's hopes of supportability from their partner, friends and significant others. It has 25 items, each item has four levels 0(nothing), 1(a little), 2(quite), and 3(much). Further 25 items are divided into three factors. The factors were namely, perceived support, depth, and conflict and each factor has 7, 6, and 12 respectively (Pierce, et al., 1991).

After collection of data, all responses of the participants were entered on data sheet of SPSS. Then the results were statistically analyzed with the help of Statistical Package for the Social Sciences 23rd version (SPSS v.23). Descriptive statistics (mean and standard deviation) as well as inferential analysis (factor analysis, correlation, independent sample t-Test, and ANOVA) were computed. To test the mediation role of the factors of quality of relationship, mediation analysis was run by using Hayes Process Macro 4th version.

Results and Discussions

Table 1: Mean and SD of Participant's Age and Duration of Illness (N=89)

Demographic Variable	<i>M</i>	<i>SD</i>
Age	34.25	12.00
Duration of Illness	9.05	8.71

Note. *M*= Mean, *SD*= Standard Deviation and Duration of illness in years

The above table showed that the mean age of the participants is 34 years almost with the age variation of (*SD*=12.00). The mean duration of illness is 9.05 (*SD*=8.71) years which depicts that most of the participants experiencing epileptic seizures for almost the last 9 years. This table will help us in further categorizing the sample into groups and analysis of the results.

Table 2: Percentages and Frequencies of Demographic Characteristics of Participants (N=89)

Demographic Variables	<i>f</i>	%
Gender		
Men	53	59.60
Women	36	40.40
Education		
Middle or Below	23	25.80
Matriculation	18	20.20
Intermediate	28	31.50
Graduation or above	20	22.50
Marital Status		
Married	62	69.70
Single	27	30.30
Last Seizure before (Month)		
1-3	49	55.10
4-6	21	23.60
7-9	9	10.10
10-12	10	11.20
Work Status		
Working	50	56.20
Non-working	39	43.80

Note: *f* = frequency, % = percentage

The above table indicated that the sample for the current study was 89 PWE. The number of men (59.60%) is higher than women (40.40%) in the current sample. As above table indicated that the sample was divided into four categories based on education. The education of most of the participants was intermediate (31.50%). Moreover, 69.70% of participants were married in the current sample. Furthermore, 55.10% of participants experience their last epileptic seizure 1-3 months before. The last demographic variable for the current study was work status. The above indicated that most of the participants in the current study were working 56.20%.

Table 3: Mean, Standard Deviation and Correlation in Fear of others, Personal Attributes, Support in Relationship, Depth of Relationship, Conflicts in Relationships, Emotional Instability and Somatic Problems in epileptics (N=89).

Factors	Fear of others	Personal Attributes	Support in Relationship	Depth of Relationship	Conflicts in Relationships	Emotional Instability	Somatic Problems
Fear of others	---	.23*	-.24*	-.21*	-.11	.11	.33**
Personal Attributes	---	--	.10	.22*	-.04	.19	.04
Support in Relationship	---	---	---	.66**	-.01	-.26*	-.06
Depth of Relationship	---	---	---	---	-.04	-.34**	-.02
Conflicts in Relationships	---	---	---	---	--	-.25*	-.49**
Emotional Instability	---	---	---	---	---	---	.35**
Somatic Problems	---	---	---	---	---	---	---
<i>M</i>	13.25	14.55	10.65	10.07	17.01	15.91	15.42
<i>SD</i>	5.52	4.81	4.26	3.96	5.90	5.02	5.05

Note. *p<.05, **p<.01, ***p<.001, M= Mean, SD= Standard Deviation

In the above table, the correlation was tested on the factors or subscales instead of whole measures. The results revealed significant, positive but weak correlation between fear of others and personal attributes of epileptics. Somatic problems in epileptics had a moderate, positive, and significant relationship with the first factor of self-concealment i.e. fear of others. Which means PWE who has fear of others are experience more somatic problems or vice versa. There was found negative, weak but a significant relationship in support and fear of others, which illustrated that individuals receive less support from their loved ones or are more likely to have fear of others or vice versa and they also have less depth in their relationships. Personal attributes positively significantly correlate with depth in relationship.

The table also indicated that there is a strong positive and significant relationship between support and depth of relationship but relationship support has a negative significant correlation with emotional instability. Moreover, there was found a moderate, negative and significant relationship between depth in relationship and emotional instability. Conflicts in relationship have a high, negative and significant relationship with emotional instability and somatic problems. Emotional instability is positively significantly correlated with somatic problems in epileptics.

After interpreting above of the following table we can conclude that there is a significant relationship among the factors of self-concealment, quality of relationship and psychosocial reactions in epileptics.

Table 4: Regression Coefficients, Standard Error and Model 2 Summary for Self-Concealment, Support and Depth in Relationship and Psychosocial Reactions in Epileptics (N=89).

Antecedent	Consequent							
	M2 (SDQRI)				Y (PSRES)			
		B	SE	P		B	SE	p
X (SC)	a	-.06	.10	.53	c'	.28**	.10	.01
M2 (SDQRI)		---	---	---	b	.23*	.11	.04
Constant	I	22.45	2.86	.000	I	18.61	3.91	.000
	$R^2 = .005$				$R^2 = .11$			
	$F(1, 87) = 0.40, p = .53$				$F(2, 86) = 5.51, p = .007^{**}$			

Note. SDQRI= Support and Depth in Quality of Relationship, SC= Self- Concealment, PSRES= Psychosocial Reactions in Ecliptics, SE= Standard Error, β = Coefficient of Regression, M2= Model 2, * $p < .05$, ** $p < .01$, *** $p < .001$

Table indicated that the psychosocial reactions in epileptics are significantly predicted by support and depth in relationship ($\beta = .23$, $SE = .11$, $p < .05$) but the effect of self-concealment on support and depth in relationship was found insignificant. Furthermore, the total effect of self-concealment on psychosocial reactions in epileptics in the presence of support and depth in relationship ($\beta = .27^{**}$) was significant. The current results showed that the support and depth in relationship plays a partial but significant mediating role in the relationship between self-concealment and psychosocial reactions in epileptics ($\beta = .28^{**}$, $p < .01$) path c'.

Results revealed that conflict in a relationship plays a full and significant mediating role in between the relationship of self-concealment and psychosocial reactions in epileptics. Previous researches also stated that hiding one's true feelings from their spouse are linked with worse relationship well-being (Uysal et al., 2012). According to Uysal et al (2011), concealing about chronic disease might increase the self-reported pain and diminished interpersonal well-being. Self-concealment has been linked to higher levels of overall psychological discomfort as well as problems in relationships (Cepeda-Benito & Short, 1998). Individuals reported higher levels of self-concealment, while their spouses reported lower levels of trust in them (Uysal et al., 2012). In couples, self-concealment may generate a virtuous circle of conflict and loss of trust. Furthermore, self-concealment among partners, which would gradually damage the relationship's well-being (Uysal et al., 2012). Relationship avoidance, relationship anxiety, and interpersonal conflict all have a positive correlation with anxiety (Green, et al., 2017).

More over mediation analysis explored the mediating effects of support and depth in relationship between self-concealment and psychosocial reactions in epileptics. Results of second model M2 indicated that support and depth in relationship plays a partial but significant mediating role in the relationship between self-concealment and psychosocial reactions in epileptics. Anxiety is inversely related to relationship support and depth (Green, et al., 2017). Social support is a strong predictor of psychological well-being and self-concealment (Proctor et al., 2009). Family support is a major and significant influencing mediator toward psychological well-being such as life satisfaction, hopelessness, and suicidal ideation) (Lai & Ma, 2016).

it is concluded, the main hypotheses of the current study were accepted. As there was found a significant negative correlation among the factors of self-concealment, quality of relationship, and psychosocial reactions in epileptics. In addition, mediation analysis revealed that conflict in relationship fully mediates the relationship between self-concealment and psychosocial reactions in epileptics. Moreover, support and depth in relationship partially mediated in the relationship between self-concealment and psychosocial reactions in epileptics.

Summary

To find out the relationship in self-concealment, quality of relationship, and psychosocial reactions in epileptics correlation analysis was run. The results of correlation revealed that there is a negative significant relationship among the factors of self-concealment and quality of relationship. Furthermore, there is a significant positive relationship between the factors of self-concealment and psychosocial reactions in epileptics.

To find out the mediation between self-concealment, quality of relationship, and psychosocial relations in epileptics Hayes Process macro was used. The results of mediation show that the conflict in relationship fully mediates in the relationship between self-concealment and psychosocial reactions in epileptics and support and depth in relationship partially mediated in the relationship between self-concealment and psychosocial reactions in epileptics.

Suggestions

- It is a small-scale study since the sample for the current study consisted of 89 individuals from various cities in Punjab. It is therefore suggested that researches should be conducted on a large sample size from other provinces of Pakistan to generalize findings.
- Current research is just focusing on the psychological and social domains of epileptics. Therefore, it is suggested to conduct researches to analyze other factors such as age of onset of illness, treatment approaches, compliance toward treatment, and treatment effectiveness.

References:

- Acitelli, L. K., Forgas, J. P., & Fitness, J. (2008). Knowing when to shut up: Do relationship reflections help or hurt relationship satisfaction. *Social relationships: Cognitive, affective, and motivational processes*, 115-129.
- Amtson, P., Drodge, D., Norton, R., & Murray, E. (1986). The perceived psychosocial consequences of having epilepsy. *Psychopathology in epilepsy: Social dimensions*. Oxford University Press.
- Aziz, H., Akhtar, S. W., & Hasan, K. Z. (1997). Epilepsy in Pakistan: Stigma and psychosocial problems. A population-based epidemiologic study. *Epilepsia*, 38(10), 1069-1073. <https://doi.org/10.1111/j.1528-1157.1997.tb01195.x>
- Beghi, E., & Giussani, G. (2018). Aging and the epidemiology of epilepsy. *Neuroepidemiology*, 51(3-4), 216-223.
- Bell, G. S., Neligan, A., & Sander, J. W. (2014). An unknown quantity the worldwide prevalence of epilepsy. *Epilepsia*, 55(7), 958-962.
- Benbadis, S. (2009). The differential diagnosis of epilepsy: A critical review. *Epilepsy & Behavior*, 15(1), 15-21.
- Bonnesen, J. L., & Hummert, M. L. (2002). Painful self-disclosures of older adults in relation to aging stereotypes and perceived motivations. *Journal of Language and Social Psychology*, 21(3), 275-301.
- Cepeda-Benito, A., & Short, P. (1998). Self-concealment, avoidance of psychological services, and perceived likelihood of seeking professional help. *Journal of Counseling Psychology*, 45, 58-64.
- Charyton, C., Elliott, J. O., Lu, B., & Moore, J. L. (2009). The impact of social support on health related quality of life in persons with epilepsy. *Epilepsy & Behavior*, 16(4), 640-645.
- Chung, Y. M., Chang, C. Y., & Lai, C. H. (1995). Survey of public awareness, understanding, and attitudes toward epilepsy in Taiwan. *Epilepsia*, 488-493.
- Coolings, J. (1990). Psychosocial well-being and epilepsy: An empirical study. *Epilepsia*, 418-26.
- Cruddas, S., Gilbert, P., & McEwan, K. (2012). The relationship between self-concealment and disclosure, early experiences, attachment, and social comparison. *International Journal of Cognitive Therapy*, 5(1), 28-37.
- Cummins, J. (2001). Life with Epilepsy, Report. *Joint Epilepsy Counsel of Australia*.
- Decker, C. L. (2007). Social support and adolescent cancer survivors: A review of the literature. *Psycho-Oncology: Journal of the Psychological, Social and Behavioral Dimensions of Cancer*, 16(1), 1-11.

- Derlega, V. J., & Grzelak, J. (1979). *Appropriateness of self-disclosure*. San Francisco, CA: Jossey-Bass.
- Durkin, M.S., Davidson, L.L., Hasan, Z.M, et al (2003). Estimates of the prevalence childhood seizure disorders in communities where professional resources are scarce: results from Bangladesh, Jamaica and Pakistan. *Pediatric Pedant Epidemiology* (6), 166-80.
- Elliott, J. O., Charyton, C., Lu, B., & Moore, J. L. (2009). Serious psychological distress and health outcomes for persons with epilepsy in poverty. *Seizure*, 18(5), 332-338.
- Friedrich, L., Taslak, M., Tomasovic, S., Bielen, I. (2015). How does the label “epileptic” influence attitudes toward epilepsy? *Seizure*, 33, 54-9.
- Green, B., Norman, P., & Reuber, M. (2017). Attachment style, relationship quality, and psychological distress in patients with psychogenic non-epileptic seizures versus epilepsy. *Epilepsy & Behavior: E&B*, 66, 120-126.
<https://doi.org/10.1016/j.yebeh.2016.10.015>
- Gopinath, M., Sarma, P. S., & Thomas, S. V. (2011). Gender-specific psychosocial outcome for women with epilepsy. *Epilepsy & Behavior: E&B*, 20(1), 44-47.
<https://doi.org/10.1016/j.yebeh.2010.10.013>
- Hagger, B. F., & Riley, G. A. (2017). The social consequences of stigma-related self-concealment after acquired brain injury. *Neuropsychological Rehabilitation*.
- Hoppe, C. & Elger, E. (2011). Depression in epilepsy: A critical review from a clinical perspective. *Nature Reviews Neurology*, 462-472.
<https://doi.org/10.1177/0146167211429331>
- Kanner, A. M., Schachter, S. C., Barry, J. J., Hersdorffer, D. C., Mula, M., Trimble, M., Hermann, B., Ettinger, A. E., Dunn, D., Caplan, R., Ryvlin, P., & Gilliam, F. (2012). Depression and epilepsy: Epidemiologic and neurobiologic perspectives that may explain their high comorbid occurrence. *Epilepsy & Behavior*, 24(2), 156-168.
<https://doi.org/10.1016/j.yebeh.2012.01.007>.
- Kanner, A. M., Soto, A., & Gross-Kanner, H. (2004). Prevalence and clinical characteristics of postictal psychiatric symptoms in partial epilepsy. *Neurology*, 62(5), 708-713.
- Kelly, A. E. (2002). *The psychology of secrets*. Springer Science & Business Media.
- Khan, S., & Akhter, S. (2002). Epilepsy in rural community of Pakistan: a description of one hundred patients. *Journal of the College of Physicians and Surgeons Pakistan*, 728-730.
- Khatri, A. I., Iannaccone, T. S., Ilyas, S. M., Abdullah, M. & Saleem, S. (2003). Epidemiology of epilepsy in Pakistan: review of literature. *Journal of the Pakistan Medical Association*, 594-597.

- Kissane, D. W., Patel, S. G., Baser, R. E., Bell, R., Farberov, M., Ostroff, J. S., ... & Shah, J. P. (2013). Preliminary evaluation of the reliability and validity of the Shame and Stigma Scale in head and neck cancer. *Head & neck*, 35(2), 172-183.
- Lai, C. C., & Ma, C. M. (2016). The mediating role of social support in the relationship between psychological well-being and health-risk behaviors among Chinese university students. *Health psychology open*, 3(2), 2055102916678106.
- Lane, J. D., & Wegner, D. M. (1995). The cognitive consequences of secrecy. *Journal of Personality and Social Psychology*, 69, 237-253. <https://doi.org/10.1037/0022-3514.69.2.237>
- Leaffer, E. B., Hesdorffer, D. C., Begley, C. (2014). Psychosocial and socio-demographic associates of felt stigma in epilepsy. *Epilepsy Behave*, (37) C, 104-9.
- Lin, J. J., Mula, M., Hermann, B. P. (2012). Uncovering the neurobehavioral comorbidities of epilepsy over the lifespan. *Lancet*, (380), 1180-92.
- Masuda, A., & Boone, M. S. (2011). Mental health stigma, self-concealment, and help-seeking attitudes among Asian American and European American college students with no help-seeking experience. *International Journal for the Advancement of Counselling*, 33(4), 266-279.
- Miller, P., & Ingham, I. G. (1976). Friends, confidant, and symptoms. *Social Psychiatry*, 11, 51-68.
- Morry, M.N., Reich, T., & Kito, M. (2010). How do I see you relative to myself? Relationship quality as a predictor of self and partner-enhancement within cross-sex friendships, dating relationships, and marriages. *The Journal of Social Psychology*, 150(4), 369-392.
- Neligan, A., Hauser, W. A., & Sander, J. W. (2012). The epidemiology of the epilepsies. *Epilepsy*, 113-133. <https://doi.org/10.1016/b978-0-444-52898-8.00006-9>
- Pennebaker, J. W., & Beall, S. K. (1986). Confronting a traumatic event: Toward an understanding of inhibition and disease. *Journal of Abnormal Psychology*, 95, 274-281. <https://doi.org/10.1037/0021-843X.95.3.274>
- Pennebaker, J. W., & Chew, C. (1985). Behavioral inhibition and electro dermal activity during deception. *Journal of Personality and Social Psychology*, 49, 1-7.
- Pennebaker, J. W., & O'Heeron, R. C. (1984). Confiding in others and illness rare among spouses of suicide and accidental death victims. *Journal of Abnormal Psychology*, 93, 473-476.
- Pierce, G. R., Sarason, I. G., & Sarason, B. R. (1991). General and relationship-based perceptions of social support: Are two constructs better than one? *Journal of*

Personality and Social Psychology, 61, 1028-1039. <https://doi.org/10.1037/0022-3514.61.6.1028>

- Pohl, H., Gantenbein, A. R., Sandor, P. S., Schoenen, J., & Andrée, C. (2021). The impact of the disease burden on the quality of life of cluster headache patients. *Cephalgia Reports*, 4, 25158163211029909.
- Proctor, C. L., Linley, P. A., & Maltby, J. (2009). Youth life satisfaction: A review of the literature. *Journal of Happiness Studies*, 10(5), 583-630.
- Russell, D. E. (1986). *The secret trauma: Incest in the liaes of girls and women*. New york: Basic Books.
- Sahar, N. U. (2012). Assessment of psychological distress in epilepsy: Perspective from Pakistan. *Epilepsy Research and Treatment*, 12-20.
- Santosh, D., Kumar, T. S., Sarma, P. S., & Radhakrishnan, K. (2007). Women with onset of epilepsy prior to marriage: disclose or conceal. *Epilepsia*, 48(5), 1007-1010.
- Scambler, G., & Hopkins, A. (1986). Being epileptic: Coming to terms with stigma. *SOC Health Illness*.
- Tedrus, G. M. A. S., Fonseca, L. C., & Pereira, R. B. (2015). Marital status of patients with epilepsy: Factors and quality of life. *Seizure*, 27, 66-70. <https://doi:10.1016/j.seizure.2015.02.028>
- Tellez-Zenteno, J.F., Patten, S.B., Jette, N., Williams, J., Wiebe, S. (2007). Psychiatric comorbidity in epilepsy: A population-based analysis. *Epilepsia*, 48, 2336-44.
- Theodore, W. H., Spencer, S. S., Wiebe, S., Langfitt, J. T., Ali, A., Shafer, P. O., ... & Vickrey, B. G. (2006). Epilepsy in North America: a report prepared under the auspices of the global campaign against epilepsy, the International Bureau for Epilepsy, the International League Against Epilepsy, and the World Health Organization. *Epilepsia*, 47(10), 1700-1722.
- Thijs, R. D., Surges, R., O'Brien, T. J., & Sander, J. W. (2019). Epilepsy in adults. *The Lancet*, 393(10172), 689-701.
- Towbin, A. P. (1978). The confiding relationship: A new paradigm. *Psychotherapy: Theory. Research and Practice*, 15, 333 -943.
- Uysal, A. (2020). Motivational differences and similarities between concealment and disclosure processes. *Current opinion in psychology*, 31, 122-126.
- Uysal, A., Lin, H. L., & Bush, A. L. (2012). The reciprocal cycle of self-concealment and trust in romantic relationships. *European Journal of Social Psychology*, 42(7), 844-851.
- Vaux, A. (1985). Variations in social support associated with gender, ethnicity, and age. *Journal of Social Issues*, 41(1), 89-110.

- Wiebe, S., Bellhouse, D. R., Fallahay, C., & Eliasziw, M. (1999). Burden of epilepsy: the Ontario Health Survey. *Canadian Journal of Neurological Sciences*, 263-270.
- Wismeijer, A. A., Van Assen, M. A., Sijtsma, K., & Vingerhoets, A. J. (2009). Is the negative association between self-concealment and subjective well-being mediated by mood awareness? *Journal of Social and Clinical Psychology*, 28(6), 728-748. <https://doi:10.1521/jscp.2009.28.6.728>
- World Health Organization (2015). Epilepsy fact sheets. Retrieved from: <http://www.who.int/mediacentre/factsheets/fs999/en/>
- Drecun, A. C. (2005). *Marriage and Family Therapists' Perceptions of and Adherence to Implementing a Policy for Family Secrets*. Alliant International University, San Diego.