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Original Article

The Perceived Social Support, Dysfunctional Attitude, Resilience and Quality of Life in Hemiplegic Paralyzed Patients

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ABSTRACT

Objectives: To assess how perceived social support and dysfunctional attitudes influence the quality of life of hemiplegic paralysed patients and the role of resilience in changing the dysfunctional attitudes of these patients.

Study Design: Cross-sectional study.

Place and Duration of Study: Allied Hospital Neurology/Medicine Department, Ali Poly Clinic, and Bukhari Homeopathic Clinic Faisalabad Pakistan, from Mar to Jul 2022.

Methodology: Two hundred and ten hemiplegic paralysed patients were included in the study. Multidimensional Scale for Perceived Social Support, Dysfunctional Attitude Scale, Brief Resilience Scale, and World Health Organization Quality of Life –Bref were used for data collection.

Results: Findings demonstrated significant mean difference across age groups on quality of life [F (2, 207) = 17.34, $p<0.01$], resilience [F (2, 207) = 16.94, $p<0.01$], perceived social support, [F (2, 207) = 7.99, $p<0.01$] and dysfunctional attitude [F (2, 207) = 3.05 $p<0.05$]. Perceived social support has a positive correlation with resilience (p-value <0.01, r=.24) and quality of life (p-value <0.01, r=.48). In contrast, negatively correlated with dysfunctional attitude subscales of social approval ($p<0.01$, r=-0.23) and autonomy ($p<0.01$, r=-0.29) while no correlation with dysfunctional attitude subscales perfectionism ($p=0.06$, r=.12) and dependency ($p=0.41$, r=-.05).

Conclusion: Our study indicated that paralysed patients with high perceived social support will have high resilience, a better quality of life, and a low dysfunctional attitude towards the ailment.

Keywords: Dysfunctional attitude, Hemiplegic, Paralysis, Resilience, Social support, Quality of life.

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INTRODUCTION

The World Health Organization describes paralysis as sudden onset of weakness in any portion of the human body.[1] The causes of paralysis may vary from person to person; the main causes of paralysis are stroke, congenital disability, hypertension, tumour, spinal cord injury, and traumatic brain injury.[2,3] Different psychosocial factors may prove helpful in treating this disease or have adverse effects, such as social support and resilience, which are the positive aspects.[4]

Perceived social support is a person's perception regarding surrounding socialising agents, including parents, siblings, friends, colleagues, neighbours, and others.[5] It is a positive element of an individual personality because people are available around them when he/she needs any help; on the other hand, a study described that a dysfunctional attitude is a negative aspect of a person's personality.[6] In a dysfunctional attitude, a person has negative and inappropriate thinking, feelings, and beliefs regarding other people and himself, which moves them toward bio-psychosocial abnormalities.[7] Resilience is another important characteristic of an individual's personality that promotes quality of life and minimises dysfunctional attitudes.[8] Quality of life is a broader concept in which physical and psychological health, social relationships, and external environment play a vital role in maintaining a happy, healthy, and purposeful life.[9] The quality of life can be explained in various contexts, such as social support, love and belongings, physical and mental health, freedom of expression, socioeconomic status, qualification, normal growth and development, money, happy marital relationships, children and parents.[10]

The aim of this study was to assess how perceived social support and dysfunctional attitudes influence the quality of life of hemiplegic paralysed patients and what was the role of resilience in changing the dysfunctional attitudes of people having different demographic characteristics such as age, gender, qualification, monthly income, marital status, family type (joint/nuclear), residence (rural/urban), family size, level of dependency, duration of ailment.

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METHODOLOGY

The cross-sectional study was conducted from March to July 2022 at Allied Hospital Neurology/ Medicine Department, Ali Poly Clinic, and Bukhari Homeopathic Clinic Faisalabad Pakistan, after approval was attained from the Ethical Review Committee (letter no. GCUF/ERC/141).The sample size was calculated through G-Power software.[11]

Inclusion Criteria: Hemiplegic paralysed patients of either gender, aged 20-50 years old who could comprehend and respond to the researcher, with limited ability to move and depend on others to perform daily tasks such as bathing, toileting, walking, eating, drinking, self-care, etc. were included.

Exclusion Criteria: Physically or mentally ill people before paralysis onset and patients with monoplegia, diplegia, or quadriplegia were excluded; in addition, patients who did not have any caregivers were also excluded.

The Multidimensional Scale for Perceived Social Support (MSPSS),[12] was used to assess the level of perceived social support among sufferers. The Dysfunctional Attitude Scale (DAS),[13] was used to disclose the dysfunctional attitude of patients regarding the ailment. Similarly, the Brief Resilience Scale (BRS),[14] was used to describe the resilience level of paralysed victims, World Health Organization Quality of Life – Bref (WHOQOL-Bref),[2] was used to assess the overall quality of life after paralysis and demographic sheet were used to gather personal data.

The data were collected after a detailed explanation and instruction regarding the research to the respondents. Written consent was obtained from them to ensure confidentiality in the entire research process. Face-to-face interviews were conducted with paralysed patients to gather information. Data was collected using four scales: MSPSS, DAS, BRS, and WHOQOL-Bref. All the copyrighted materials (Scales) were used after the prior permission of the concerned authorities.

Statistical Package for Social Sciences (SPSS) version 24.0 was used for the data analysis. Quantitative variables were expressed as Mean±SD and qualitative variables were expressed as frequency and percentages. Correlation analysis, and One-way analysis of variance were used to describe the difference among variables. The *p*-value lower than or up to 0.05 was considered as significant.

RESULTS

Out of 210 hemiplegic paralyzed patients, 110(71.4%) were men, while 60(28.6%) were women.

Table-I: Characteristics of Paralyzed Patients (n=210)

Characteristics	Categories	n (%)
Age	20-30 Year	69(32.9)
	31-40 Year	64(30.5)
	41-50 Year	77(36.7)
Gender	Men	150(71.4)
	Women	60(28.6)
Residence	Rural	90(42.9)
	Urban	120(57.1)
Family Type	Joint	101(48.1)
	Nuclear	109(51.9)
Marital Status	Married	110(52.4)
	Unmarried	100(47.6)
Dependency	Total	99(47.1)
	Partial	111(52.9)

Table-II: Correlation among Perceived Social Support, Dysfunctional Attitude, Reilience and the Quality of Life (n=210)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. PSS	-													
2. Family	0.44**	-												
3. Friends	0.55**	0.36**	-											
4. Sig O	0.61**	0.63**	0.39**	-										
5. DA	0.01	-0.07	0.02	-0.07	-									
6. Perf	0.13	-0.08	0.15*	0.01	0.43**	-								
7. Soc A	0.23**	-0.16*	-0.07	-0.16*	0.56**	0.57**	-							
8. Dep	-0.06	-0.09	0.06	-0.13	0.53**	0.69**	0.54**	-						
9. Auto	-0.29**	0.01	0.20**	-0.07	0.01	0.64**	-0.17*	0.35**	-					
10. QoL	0.48**	0.29**	0.39**	0.34**	-0.16*	0.17*	-0.19**	-0.04	-0.42**	-				
11. Phy H	0.43**	0.27**	0.36**	0.29**	-0.06	0.11	-0.05	-0.17*	-0.22**	0.85**	-			
12. Psy H	0.32**	0.29**	0.22**	0.29**	-0.21**	0.09	-0.23**	-0.01	-0.37**	0.88**	0.64**	-		
13. Soc R	0.39**	0.25**	0.45**	0.28**	-0.06	0.09	-0.13	-0.01	-0.17*	0.76**	0.64**	0.52**	-	
14. Envmt	0.45**	0.24**	0.35**	0.32**	-0.17*	0.18**	-0.17*	-0.02	-0.49**	0.95**	0.73**	0.82**	0.68**	-
15. RES	0.24**	0.03	0.16*	0.08	-0.04	0.15*	0.15*	-0.08	-0.41**	0.23**	0.27**	0.05	0.13	0.27**

*Note: P<0.01**, P<0.05*: PSS: Perceived Social Support; Sig O: Significant Others; DA: Dysfunctional Attitude; Perf: Perfectionism; Soc A: Social Approval; Dep: Dependency; Auto: Autonomy; QoL: Quality of Life; Phy H: Physical Health; Psy H: Psychological Health; Soc R: Social Relationship; Envmt: Environment; RES: Resilience*

Table-III: One Way Analysis of Variance in Perceived Social Support, Dysfunctional Attitude, Resilience and Quality of life across age groups of Paralyzed Patients (n=210)

	20-30 Years	30-40 Years	40-50 Years		
Variables	Mean±SD	Mean±SD	Mean±SD	F (2,207)	ŋ2
Quality of life	73.99±15.56	85.00±18.80	68.42±16.10	17.34**	0.41
Resilience	16.77±4.48	20.64±6.36	15.52±5.15	16.94**	0.40
Perceived social support	62.14±9.32	68.48±12.46	62,18±9.81	7.99**	0.28
Dysfunctional attitude	142.64±7.99	139.23±21.11	144.94±91.05	3.05*	0.17

*P<0.01**, p<0.05**

101(48.1%) patients belonged to joint families while 109(51.9%) from the nuclear family system. 99(47.1%) patients were fully dependent on their caregivers to perform daily activities like walking, bathing, eating, drinking, and toileting, while 111(52.9 %) were partially dependent on their caregivers (Table-I). Table-II shows that perceived social support has a positive correlation with resilience (*p*-value <0.01, r=.24) and quality of life (*p*-value <0.01, r=.48). In contrast, it has a negative correlation with dysfunctional attitude subscales of social approval (*p*<0.01, r=-0.23) and autonomy (*p*<0.01, r=-0.29) and no correlation with dysfunctional attitude subscales perfectionism (*p*=.06, r=.12) and dependency (*p*=0.41, r=-.05).

Table-III compares perceived social support, Dysfunctional attitude, Resilience, and Quality of life across age groups. Findings showed a significant mean difference across age groups on quality of life F (2, 207)=17.34, *p*<0.01. The value of ŋ2 was 0.41, indicating a small effect size. Similarly, the mean difference across age groups on resilience F(2, 207)=16.94, *p*<0.01. Differences exist across age groups on perceived social support F (2, 207) = 7.99, *p*<0.01, which showed that 30-40-year-old paralysed victims have greater perceived social support than other groups. Furthermore, outcomes showed differences across age groups on dysfunctional attitude F (2, 207) = 3.05, *p*<0.05.

DISCUSSION

This study demonstrates considerable differences among hemiplegic paralysed patients' resilience, dysfunctional attitude, perceived social support, and quality of life concerning patients' different ages, gender, monthly income, marital and socioeconomic status, education, family type, residence, family size, level of dependency, and duration of illness. The study's findings also depict that perceived social support positively correlates with resilience and quality of life (*p*<0.01). In contrast, it has a significant negative correlation with dysfunctional attitude subscales social approval and autonomy (*p*<0.01) and no correlation with dysfunctional attitude subscales perfectionism (*p*=.06) and dependency (*p*=0.41). The mean perceived social support was 64.09±10.891, dysfunctional attitude 142.44±13.810, resilience 17.49± 5.745 and quality of life 75.30±18.070. The findings show that perceived social support has a significant positive correlation with the quality of life of paralysed patients. The current study shows the same outcomes as the,[15] found in their research. Another study was conducted on hemodialysis patients in 2021.[15] The study's results depict that adequate social support is good for physiological and psychological health and positively impacts a person's life. The outcomes of this study also match our study results. The second speculation of this study was that a dysfunctional attitude toward life affects the quality of life of paralysed people. The outcome depicts that dysfunctional attitude significantly inverses correlated with the quality of life of paralysed patients. Previous literature supports current study results.[16,17]

Further, another study,[18] was conducted in 2021 on inpatient treatment. The findings of this study demonstrated that a dysfunctional attitude of patients regarding ailment was positively associated with depressive symptoms that significantly impact an individual quality of life. The finding illustrates that resilience significantly correlates with perceived social support and quality of life. The results of another study also supported these study results.[19] The other research was conducted on patients with chronic kidney disease (CKD) in 2020.[20] The outcomes of this study described that resilience positively impacts patients with chronic kidney disease and is one of the significant predictors that influence patients' quality of life.

Lutz *et al.*[21] investigated the relationship between resilience, depression, anxiety, and the quality of life in stroke patients. They took a sample of two hundred fifteen individuals from hospitals through a cross-sectional study. They used the Connor-Davidson resilience scale (Chinese version), Stroke scale, quality of life, Functional independence measure, & Hospital Anxiety and stress scale to gather data from the

research participants. The outcomes of the study showed that resilience is negatively correlated with depression and anxiety while it was positively correlated with the quality of life of stroke patients.

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CONCLUSION

The findings of this research study depict that if a person has healthy perceived social support and resilience, he/she will have a higher chance to overcome dysfunctional attitudes regarding ailments and have a better quality of life. The consequences of this study will support the management of the dysfunctional attitude of the paralysed patient and help the individual understand how social support and resilience work positively to manage such ailments. This study will also prove helpful to caregivers of the sufferers to understand how the quality of life can give better outcomes to manage such disease. Thus, a medical practitioner should also focus on these psychosocial factors, the patient's mental health, and physical health to cure/manage this disease in a better way. Therefore, this study will endeavour to understand these issues.

Conflict of Interest: None.

Authors' Contribution

Following authors have made substantial contributions to the manuscript as under:

NS & RK: Data acquisition, data analysis, critical review, approval of the final version to be published.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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