

SHORT COMMUNICATION

QUALITY OF LIFE IN PATIENTS WITH NEUROGENIC COMMUNICATION DISORDER

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ABSTRACT

Background: neurogenic communication disorders e.g. Dysarthria, aphasia and Voice disorders impacts the quality of life of individuals. A comprehensive picture for an intense understanding of different dimensions, that affecting QOL in neurogenic communication disorder is needed. **Objectives:** to determine the Quality of life in patients with neurogenic communication disorders **Method:** The Study design was comparative Cross-sectional survey. A total of n=100 participants were included through Conventional sampling technique. The data was collected from speech therapy department of Pakistan Railway Hospital (PRH) and NESCOM hospital Islamabad. The male and females both were included in the study. The older adults with age range 50-75 years with neurogenic conditions like dysarthria, aphasia and voice disorders related to stroke, Bell's palsy Parkinson's disease and triatic brain injury were included in the study. The quality of life was assessed through Stroke Aphasia Quality of Life questionnaire. One Way ANOVA was used for comparison between the different conditions regarding quality of life (QOL). **Results:** the Mean±SD of age was 61.4 ± 7.9 years. A total of n=63 participant were male and remaining n=37 were female. The result of One Way ANOVA can be seen in Table 1, which shows that there no significant difference ($p \geq 0.05$) in neurogenic communication disorders regarding QOL. **Conclusion:** It was concluded that quality of life was compromised equally in +neurogenic communication disorders like dysarthria, aphasia and voice disorders.

Keywords: Communication disorders, Aphasia, dysarthria, voice, quality of life.

INTRODUCTION

Neurogenic communication disorder is the incompetence of a person to carry out effective communication due to weakness of the central nervous system. Individuals suffering from neurodegenerative disorders have to encounter many challenges in their daily lives; communication impairment and inability being one of them. The onset of these disorders mostly occurs in adulthood, usually as a result of stroke, tumor or injury of brain or due to progressive neurological disorders.^{1,2}

Dysarthria has adverse effects on all the systems of speech, especially velopharyngeal function. One of the primary features of dysarthria is hyper nasality.³ Individuals who suffer from ALS with dysarthria are generally incapable of taking pleasure in living. They demonstrate a rapid deterioration in their quality of life which shows as sluggish, frail, and inaccurate articulation. The disease is also presented with the incoordination of the stomatognathic system, affecting the respiratory, phonatory, resonant and articulatory systems.^{4,5}

Individuals suffering from aphasia have major limitations when it comes to social participation and association. Likewise, their QOL is severely

affected and may result in unemployment as well as social isolation. Early severity of aphasia reflects long term revival of aphasia.³ The level of severity of aphasia seriously affects the quality of life in the patients, with major limitations in the social activities and associations as well as emotional distress and several other related medical issues.⁴⁻⁶ There is limited literature available especially in Pakistani population regarding the impact of different communication disorder on quality of life. The objective of study is to compare the Quality of life in patients with neurogenic communication disorders.

METHODOLOGY

The study design was comparative Cross-sectional survey. A total of n=100 participants were included through Conventional sampling technique. The data was collected from speech therapy department of Pakistan Railway Hospital (PRH) and NESCOM hospital Islamabad. The male and females both were included in the study. the older adults with age range 50-75 years with neurogenic conditions like dysarthria, aphasia and voice disorders related to stroke, Bell's palsy Parkinson's

disease and triatic brain injury were included in the study. Patients with conditions other than above mentioned condition were excluded from the study. The demographic data was included age, gender and quality of life was assessed through Stroke Aphasia Quality of Life questionnaire. The mean±SD, n(%) and p-value were used for descriptive analysis. One Way ANOVA was used for comparison between the different conditions regarding quality of life (QOL). Data were analysed through SPSS 21.

RESULT & DISCUSSION

The Mean±SD of age was 61.4 ± 7.9 years. A total of n=63 participant were male and remaining n-37 were female. The result of One Way ANOVA can be seen in Table 1, which shows that there no significant difference ($p \geq 0.05$) in neurogenic communication disorders regarding QOL.

The study conducted to explore the quality of life among different neurogenic communication disorder. The result of study showed that quality of

life was not different in dysarthria, aphasia and voice disorder. In a correlated recent study on analysis of factors affecting QOL among individuals has shown the association between the Communication disorders and the quality of life of the patients by using Pearson's correlation elicited the computed the p value .766. As the p value is >0.05 so we conclude that there is no association between QOL and communication disorders.⁷

The several study supported the result of the current study as communication disorder mostly the aphasia which is common and usually associate the with stroke significantly impact the QOL.^{8,9} There are several reports concerning that neurogenic communication difficulties become more pronounced in patients. they feel helplessness as specific feeling in this area suggest that Complicated family dynamics, lack of communication, and insecure feelings in communities, inadequate social interaction, and many other factors are often associated with a negative impact on QOL.⁶⁻¹⁰

Table 1: comparison of neurogenic communication disorders regarding QOL

Domain	Variable	N	Mean±SD	Df	F	Sig.
Physical score	Dysarthria	29	3.28±1.24	2	0.848	0.431
	Aphasia	58	3.03±1.50			
	Voice	13	3.55±1.22			
	Total	100	3.17±1.39			
Communication score	Dysarthria	29	3.26±1.14	2	2.030	0.137
	Aphasia	58	3.148±1.29			
	Voice	13	3.89±1.13			
	Total	100	3.27±1.23			
Psychosocial score	Dysarthria	29	2.69±1.02	2	1.70	0.187
	Aphasia	58	2.70±.915			
	Voice	13	3.35±2.23			
	Total	100	2.78±1.19			
Mean score	Dysarthria	29	3.28±1.24	2	1.9	0.154
	Aphasia	58	3.03±1.50			
	Voice	13	3.55±1.22			
	Total	100	3.17±1.39			

Level of significance: $p < 0.05$

CONCLUSION

It was concluded that quality of life was compromised equally in neurogenic communication disorders like dysarthria, aphasia and voice disorders. Further study with larger sample size and gender bases differences is recommended for better understanding of the QOL in neurogenic population

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