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The Effect Of Post-Stroke Aphasic Syndromes In Quality Of Life Of Hindi Speaking Peoples.

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ABSTRACT

Aims and Objective: The aim of this study was to investigate the impact type of aphasia onquality of life in patients after one year of onset of first-ever stroke.

Material & methods: 33 patients with post stroke aphasia who were attending medicine out door and neurology outdoor clinic, admitted in wards of MY HOSPITAL and Patient being recalled from data base in neurology department of MY Hospital Indore. All assessment will be done in 2-3 session, by using HASIT (Hindi Aphasia Screening Indore Test) for presence and absence of aphasia.We used SAQOL-39 scale in the poststroke aphasia in the Hindi speaking for assessment of quality of life.

Result: SAQOL-39 is reliable and valid measure of the quality of life in people with aphasia. We found that SAQOL-39 have high internal consistency and high correlation's coefficient in HINDI speaking patient. We also found that patients with post stroke aphasia generally reduced mean of all domains of quality of life. The average value of physical domain is 64.30 points out of the maximum 85, psychosocial domain is 35.48 points out of the maximum 45, communication domain is 22.54 points out of maximum 34, energy domain was 16.12 points out of the maximum 20.total quality of life had not statistically significantly correlated with type of aphasia.

Conclusions: Our results also showed subjects with different type of aphasic syndrome differed in the results achieved in all area which tested for the quality of life, as well as in the overall quality of life. We found that Type of aphasic syndrome was significantly correlated with communication domain of quality of life, but not other domain of quality of life.

Keywords: Aphasic Syndromes, Life of Hindi Speaking Peoples.

INTRODUCTION

Quality of life is defined as individual's perceptions of their position in life in the context of culture and of value systems where they live and in relation to their goals, expectations, standards and concerns (1). The quality of life of persons with post stroke aphasia is a developing concept that is highly significant for research made in the field of their rehabilitation. Assessment of the quality of life is a very complex and sensitive process. Quality of life is, by its nature, dynamic and versatile and it depends on several factors.

Measuring the quality of life after aphasia is considered to be highly important for the following reasons: the main purpose of rehabilitation of people with aphasia is the improvement of their quality of life; understanding clients' perspectives in their lives is crucial for defining appropriate and effective interventions; the connection between aphasia and other disabilities and the quality of life can clearly be seen in assessments of the quality of life. Our research mainly focuseson the quality of life of people after a stroke, with presence of aphasia.

AIMS AND OBJECTIVE

To study the correlationbetween type of post stroke aphasic syndrome on the quality of life of person with aphasia at least one year after onset in Hindi speaking peoples .

MATERIALS AND METHOD

Hospital based group study to examine correlation between quality of life of person with post stroke aphasia.33 patients with post stroke aphasiaPatient attending medicine out door and neurology outdoor clinic in MY HOSPITAL ,admitted in wards of MY HOSPITAL.Patient being recalled from data base in neurology department of MY Hospital Indore.All assessment will be done in 2-3 session, Depending on patient cooperation and fatigability by patient and care taker. Type of aphasic syndrome and its severity were determined by Hindi Aphasia Screening Indore Test) for presence and absence ofAphasia (HASIT SCALE , Short form) . The assessment of quality of life was done by a sale of 39 items for the assessment of the quality of life for people with post stroke aphasia (Stroke and Aphasia Quality of Life Scale-39-SAQOL-39) . The quality of life questionnaire contains 39 questions from 4 areas: Physical domain: contains 17 questions covering self-care, mobility, work, functioning of upper extremities and the effect that the physical condition has on social life; Communication domain: contains 7 questions referring to speech functions and the effects of speech and language difficulties on family and social life; Psychosocial domain: contains 11 questions covering thinking processes, personality and mood; Energy domain: contains 4 questions, 3 of which refer to energy and exhaustion, and one refers to whether the subject has been in a situation in which he/she had to write things down in order to remember them. The number of points for each of the 39

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questions spanned between 1 and 5, 1 signifying the minimal or worse result, and 5 marking the maximum or best result. The final result of a specific aspect represents the sum of all points achieved from that area divided by the total number of questions from the same area.

INCLUSION CRITERIA

1. A person with stroke of at least one month duration as determined by NIHA stroke and neuroimaging.
2. A person with post stroke aphasia as determined HASIT (Hindi Aphasia Screening Indore Test), Hindi version of Frenchy aphasia screening test
3. Male and Female sex both, between 18 -80 year old will be included
4. Consent given by both patient and care taker are included.
5. Patient and care taker both are capable of responding to various testing method
6. Literate patient (Those who using writing and reading in daily life)
7. A Person has Hindi as primary language

EXCLUSION CRITERIA

1. Patient is severely ill and disabled so as to become incapable to participate in study.
2. Patient with severe Dementia.
3. Patient with severe visual loss.
4. Patient with severe hearing loss.
5. Psychotic like illness.
6. Prisoner.
7. Patient with unknown identity

Results :

.Table :1: Descriptive Statistics

	N	Mean	Median	S.D.	Minimum	Maximum
Physical domain	33	64.30	64	16.26	35.0	85.0
Psychosocial domain	33	35.48	35	5.28	26.0	45.0
Communication domain	33	22.54	22	4.43	16.0	34.0
Energy domain	33	16.12	16	1.2	13.0	20.0

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As per this table, the patients with post stroke aphasia generally reduced mean of all domains of quality of life. The average value of physical domain is 64.30 points out of the maximum 85, psychosocial domain is 35.48 points out of the maximum 45, communication domain is 22.54 points out of maximum 34, energy domain was 16.12 points out of the maximum 20.

Table : 2: Descriptive Statistics

DOMAIN	AHASIA TYPE	N	Mean [SD]
PHYSICAL DOMAIN	Brocas	8	67.75 [15.97]
	Global	8	53.87 [14.93]
	Anomic	9	70.88 [15.21]
	mixed	6	66.83[17.47]
	wernicks	1	82.00
	transcortical	1	64.00
	Total	33	
Psychosocial domain	Brocas	8	64.30 [16.26]
	Global	8	39.75 [5.45]
	Anomic	9	33.75 [4.47]
	mixed	6	34.11 [5.10]
	wernicks	1	39
	transcortical	1	36
	Total	33	
Communication domain	Brocas	8	22.12 [4.05]
	Global	8	18.00 [1.60]
	Anomic	9	26.77 [3.52]
	mixed	6	21.83 [2.92]
	wernicks	1	27.00
	transcortical	1	24.00
	Total	33	
Energy domain	Brocas	8	16.62 [1.40]
	Global	8	16.12 [1.72]
	Anomic	9	16.11 [1.33]
	mixed	6	15.50 [1.22]
	wernicks	1	16
	transcortical	1	16
	Total	33	

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Table : 3: Correlation between type of aphasia and various domains of quality of life

	Physical Domain	Psychosocial Domain	Communication Domain	Energy Domain
CHI SQUARE DF Df significance	6.876 5 .230	7.576 5 .181	18.632 5 .002	2.707 5 .745

As per this table communication domain of quality of life had statistically significantly correlated with type of aphasia.

Table : 4: Correlation between type of aphasia and total quality of life

Ranks			
	Aphasia type	**N**	**Mean Rank**
QOL	Brocas	8	20.25
	Global	8	9.38
	Anomic	9	21.17
	Mixed	6	14.50
	Wernicks	1	29.00
	Transcortical	1	17.50
	Total	33	

Test Statistics[a,b]	
	QOL
Chi-Square	9.503
Df	5
Asymp. Sig.	.091

As per this table total quality of life had not statistically significantly correlated with type of aphasia.

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Table : 5: Descriptive statistics of fluency group

Group Statistics					
	fluencygroup	N	Mean	Std. Deviation	Std. Error Mean
QOL	Non-fluent	16	133.7500	24.38169	6.09542
	Fluent	11	148.6364	19.32497	5.82670

As per this table the average total quality of life of non-fluent groups and fluent group were 133.75 and 148.63 respectively.

Discussion :

We have included 33 patient with aphasia (31 male and 2 female) having mean age 49.69 years. Most of the patients were the males with gross under representation of female could not be avoided due to social reasons. Our patients were younger as compared to subjects in studies from Western countries (69yrs-79yrs). Mean time from stroke period was 2.16 yr, comparable with other Western studies. Most of the participants were married, received speech therapy and belonged to middle class. The average BARTHEL score, MR score, NIHS score were 85.69, 2.24, 4.18 respectively. The most common aphasia syndromes were anomic (9/33,27.7%), Broca's (8/33,24.4%), Global (8/33,24.4%), mixed nonfluent (6/33,18.1%). The least common were trans cortical (1/33,3.03%) and wernick's (1/33,3.03%).

We observed that patients with post stroke aphasia generally have reduced total quality ,mean value (138.4). The average value of physical domain was 64.30 points out of the maximum 85, psychosocial domain was 35.48 points out of the maximum 45, communication domain was22.54 points out of maximum 34,energy domain was 16.12 points out of the maximum 20. Our results are mostly comparable to other studies searched from literature.

Osman Sinanovic et al(3), found that the patient with aphasia had reduced quality of life at physical, psychosocial, communication, energy domains.

Ross and Wertz (4) compared the quality of life between 18 subjects with chronic aphasia and 18 subjects without brain damage (as a control group) in their research. The results showed that subjects with aphasia had significantly lower quality of life than subjects from the control group.

Engell et al (5) studied the correlation between quality of life and language performances. Total, physical, and psychosocial scores were significantly correlated with communicative and systematic failures in spontaneous language, but not with articulation disorders.

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In our study, the severity of aphasia was significantly correlated with physical domain, communication domain, but not psychosocial domain and Energy domain.

The persons with mild post stroke aphasia have higher quality of life and persons with more severe post stroke aphasia have lower quality of life, one year after stroke in Hindi speaking patients. In our study the severity of aphasia was not significantly correlated with psychosocial domain and energy domain. It may be due to limited means of communication. Emotional problems can often be underestimated in patient with aphasia. The mild and chronic aphasic patients had a better quality of life than severe and acute ones, underlining the fact the passing of time helps patients with language disorders to adapt themselves to the new condition. Our results are similar to the many study but with some differences.

Our results also showed subjects with different type of aphasic syndrome differed in the results achieved in all area which tested for the quality of life, as well as in the overall quality of life. We found that Type of aphasic syndrome was significantly correlated with communication domain of quality of life, but not other domain of quality of life.

Bahia et al(6), reported that the NF aphasic group presents an average score lower than the value found for the F aphasic group, indicating lower QOL, there was no significant statistic difference between the groups. They also demonstrated that the domains most affected by stroke were language, social roles, and thinking in the NF aphasics group, and personality, social roles, and thinking in the F aphasics group.

In this study we found that self care, mobility, work, upper extremity, language, personality, mood, family role, social role, thinking, energy were affected domain. The selfcare, mobility, work, upper extremity , and language were the significantly affected domain and personality, mood , family role, social role, thinking, energy were not significantly affected domain in the Hindi speaking patient after post stroke aphasia .it may be because , most of the our patients are belonging to the joint family , middle class , making interaction with familiar peoples.

SUMMARY AND CONCLUSION

We also validate the SAQOL-39 scale in the post stroke aphasia in the Hindi speaking. SAQOL-39 is reliable and valid measure of the quality of life in people with aphasia. We found that SAQOL-39 have high internal consistency and high correlation's coefficient in HINDI speaking patient. We have determined the quality of life after the post stroke aphasia in Hindi speaking patient have reduced the in the physical, communicative, psychosocial, energy aspect. Previous study also showed that subjects with aphasia had significantly lower the quality of life than subjects from the control group. We also found that selfcare, mobility, work, upper extremity, and language were the most affected domain and personality, mood, family role, social role, thinking, energy were the least affected domain in the patient with aphasia . Our results are comparable with previous study. We found that personality , mood, family role, social role , thinking , energy domains were affected , but not in our patients . it may be because of, most of the patients are belonging to the joint family , middle class , making interaction with familiar peoples or may be due to limited means of communication. The results of this showed that type of aphasia influence the communicative domain, but not physical domain , psychosocial domain, energy domain.

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