

## A CROSS SECTIONAL OBSERVATION STUDY – A STUDY ON QUALITY-OF-LIFE AMONG STROKE SURVIVORS

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### ABSTRACT

**Introduction:** The World Health Organization (WHO) defines a stroke as quickly manifesting clinical evidence of a focused (or global) disruption of brain function, with symptoms lasting 24 hours or more or resulting in death, and no other clear cause other than vascular origin. 9.4 million fatalities in India were reported by the global burden of disease, including 619000 stroke deaths. The idea of standard of living, which is mostly dependent on income, should not be confused with quality of life. Research has indicated that disability is a significant predictor of health-related QOL and that QOL among stroke patients has a negative impact on both short- and long-term health-related QOL. To measure QOL, a multidimensional approach is required. At least four factors are considered in a QOL assessment: environment, social health, psychology, and physical health. **Aim and Objectives:** 1.To assess the quality of life among stroke patients. 2.To assess social and functional qualities among stroke patients.

**Methodology:** A cross sectional observational study was conducted on 67 patients of stroke aged more than 30 yrs at the GOVERNMENT GENERAL HOSPITAL, KURNOOL.

**Results:** Out of 67 patients, quality of life score in majority of the patients was described as that the general quality of life to be poor with 60.4% and majority of the stroke patients with 59.4% describe their general health as dissatisfied and there was significant difference seen according to sex, side of lesion, duration of stroke, socioeconomic status, occupation and hypertension. **Conclusion:** Assessing the quality of life in stroke patients is very important

because it is among the most devastating health aspects having the multiple and profound effects upon all the life aspects. By evaluating the QOL in stroke patients we can turn this aspect into active daily living and improve their overall quality of stroke patients.

**KEYWORDS:** Quality of life, Stroke.

## 1. INTRODUCTION<sup>[3]</sup>

The World Health Organization (WHO) defines a stroke as quickly manifesting clinical evidence of a focused (or global) disruption of brain function, with symptoms lasting 24 hours or more or resulting in death, and no other clear cause other than vascular origin. 9.4 million fatalities in India were reported by the global burden of disease, including 619000 stroke deaths and 28.5 million DALY.<sup>[3]</sup> A stroke can have a wide range of detrimental effects on a person's life, including death and loss of freedom.<sup>[2]</sup> "Individuals' perceptions of their position in life in context of the culture and value systems in which they live and in relation to their goals, standards, expectations, and concerns" is how the World Health Organization defines quality of life (QOL). The idea of standard of living, which is mostly dependent on income, should not be confused with quality of life. Research has indicated that disability is a significant predictor of health-related QOL and that QOL among stroke patients has a negative impact on both short- and long-term health-related QOL.<sup>[2]</sup> The evaluation of these patients' quality of life (QOL) can be useful in creating more thorough strategies for improvement and in offering rehabilitative services. Headaches and vertigo are two stroke symptoms that might also be signs of other illnesses. Frequently, the rate at which symptoms manifest is indicative of a stroke. To measure QOL, a multidimensional approach is required.<sup>[2]</sup> At least four factors are considered in a QOL assessment: environment, social health, psychology, and physical health.<sup>[2]</sup>

## 2. AIMS AND OBJECTIVES

1. To assess the quality of life among stroke patients.
2. To assess social and functional qualities among stroke patients.

## 3. METHODOLOGY

### Study area

This study was conducted at the GOVERNMENT GENERAL HOSPITAL, KURNOOL.

**Type of study**

This was hospital-based cross-sectional study.

**Study period**

The study was from January 2024 to April 2024.

**Study population**

All stroke patients who were registered at the, GOVERNMENT GENERAL HOSPITAL, KURNOOL during the above-mentioned study period.

**Inclusion criteria**

The following criteria were included in the study:

- 1) Stroke patients aged 45years and above.
- 2) Duration of stroke more than 1 year (Time since diagnosis and initiation of treatment).

**Exclusion criteria**

The following criteria were excluded from the study:

- 1) Patients with severely ill and not able to communicate.
- 2) Patients who did not give consent for participation in the study.
- 3) Pregnant and lactating women were excluded.

**Sampling method**

A sample of 67 patients was done using WHOQOL-BREF Questionnaire.

**Method of collection of data**

Prior knowledgeable written consent withinside the nearby language turned into taken from all of the sufferers blanketed withinside the study. For those who were illiterates, the consent was read out and explained to them in their language and consent was obtained by taking their signature in the consent form.

All sufferers beneath the examine had been individually interviewed and administered the questionnaire.

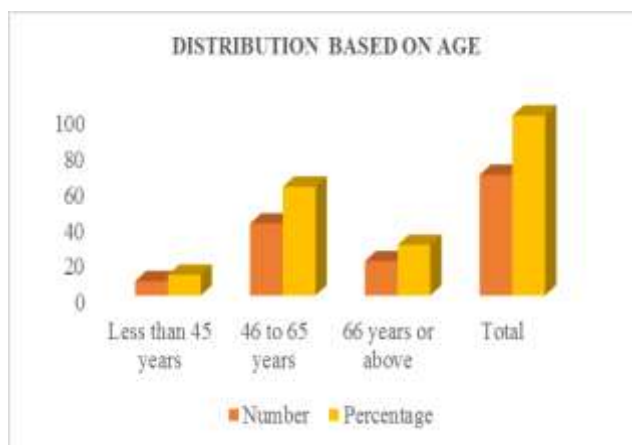
## 4. RESULTS

### 4.1 Distribution of patients according to age

The overall distribution of age groups demonstrates that the bulk of the patients were identified between 46 to 65 years 40(60.4%) followed by 66 years and above 19(28.1) % and less than 45 years 8 (11.5%).

**Table 4.1: Distribution of patients according to age.**

Age groups	Number	Percentage
Less than 45 years	8	11.5
46 to 65 years	40	60.4
66 years or above	19	28.1
Total	67	100



**Fig. 4.1: Distribution of patients according to age.**

### 4.2 Distribution of patients according to gender

Out of 67 subjects involved in the study, 52 (78.1%) were males and 15(21.9%) were females.

**Table 4.3: Distribution of patients according to gender.**

Sex	Number	Percentage
Male	52	78.1
Female	15	21.9
Total	67	100



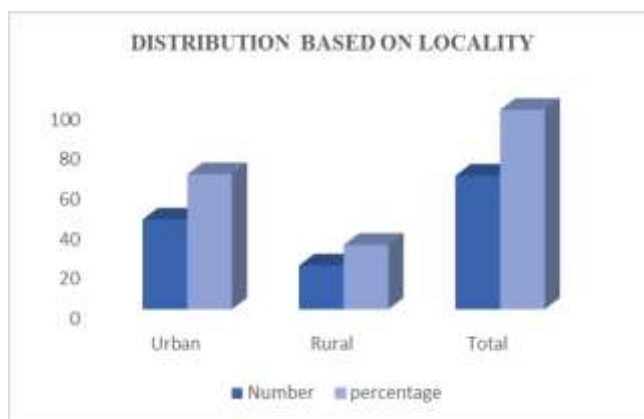
**Fig. 4.2: Distribution based upon gender.**

#### 4.3 Distribution of patients according to locality

Out of 67 patients in the study, 45(67.7%) were belongs to urban locality and 22(32.3%) were belongs to rural locality.

**Table 4.3: Distribution of patients according to locality.**

Locality	Number	Percentage
Urban	45	67.7
Rural	22	32.3
Total	67	100



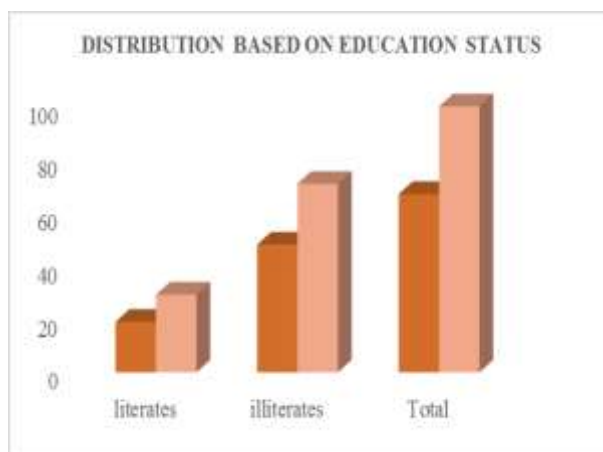
**Fig. 4.3: Distribution of patients according to locality.**

#### 4.4 Distribution of patients according to educational status

Out of 67 subjects involved in the study, 48(70.9%) were literates and 19(29.2%) were belongs to illiterates.

**Table 4.4: Distribution of patients according to educational status.**

Educational status	Number	percentage
literate	19	29.2
illiterate	48	70.9
Total	67	100



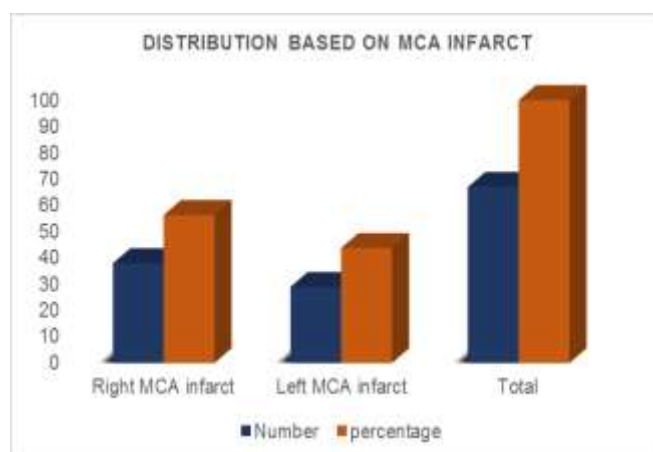
**Fig. 4.4: Distribution of patients according to educational status.**

#### 4.5 Distribution of patients according to MCA infarct

Out of 67 patients involved in this study, right MCA infarct 38 (56.3%) were seen more when compared to left MCA infarct.

**Table 4.5: Distribution of patients according to MCA infarct.**

Side of lesion	Number	percentage
Right MCA infarct	38	56.3
Left MCA infarct	29	43.8
Total	67	100



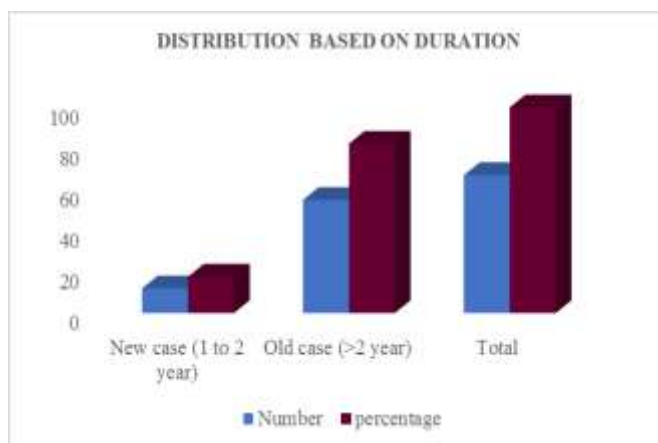
**Fig. 4.5: Distribution of patients according to duration of stroke.**

#### 4.6 Distribution of patients according to duration

According to the current study, 12(17.1%) of new cases had a higher quality of life than old cases 55(82.3 %).

**Table 4.6: Distribution of patients according to duration.**

Case	Number	percentage
New case (1 to 2 year)	12	17.7
Old case (>2 year)	55	82.3
Total	67	100

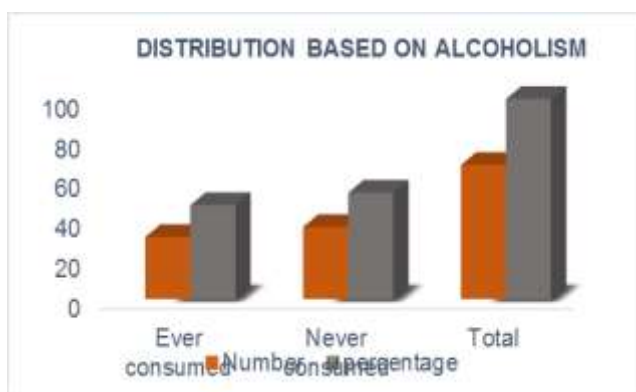
**Fig. 4.6: Distribution based on duration of action.**

#### 4.7 Distribution of patients according to alcoholism

Out of 67 patients, 36(53.1%) were never consumed alcohol while 31(46.9%) were seen with alcohol consumption.

**Table 4.7: Distribution of patients according to alcoholism.**

Alcoholism	Number	Percentage
Ever consumed	31	46.9
Never consumed	36	53.1
Total	67	100

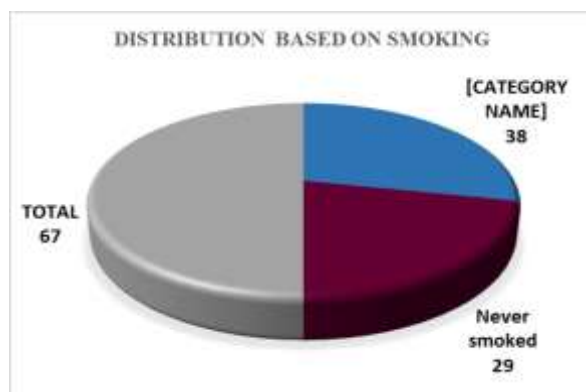
**Fig. 4.7: Distribution based on alcoholism.**

#### 4.8 Distribution of patients according to smoking

Out of 67 patients involved in the study, 38(57.3%) were smokers and 29(42.71%) were non smokers.

**Table 4.8: Distribution of patients according to smoking.**

Smoking	Number	percentage
Ever smoked	38	57.3
Never smoked	29	42.71
Total	67	100

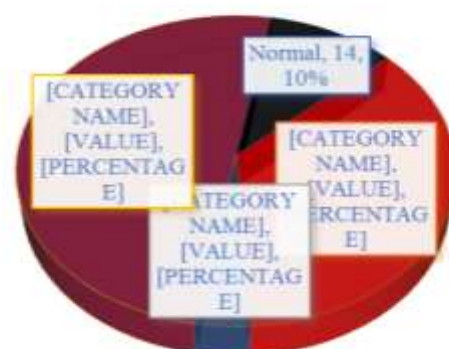
**Fig. 4.8: Distribution based on smoking.**

#### 4.9 Distribution of patients according to hypertension

According to this study, pre hypertension 48(71.9%) were more when compared to normal 14(20.8%) followed by stage I hypertension 5(7.3%).

**Table 4.9: Distribution of patients according to hypertension.**

Hypertension	Number	Percentage
Normal	14	20.8
Pre hypertension	48	71.9
Stage I hypertension	5	7.3
Total	67	100

**DISTRIBUTION BASED ON HYPERTENSION****Fig. 4.9: Distribution based on hypertension.**



**Table 4.10: Frequency responses (%) for the predominant domains of QOL.**

Domains and Scale points	QOL scores (%)				
	1	2	3	4	5
General quality of life	0	40(60.4)	24 (35.4)	2(4.2)	0
General health	1(1.0)	39 (59.4)	22(32.3)	4 (6.3)	1 (1.0)
<b>Physical domain</b>					
Pain and discomfort	0	2 (2.1)	25(38.5)	34 (50.0)	6 (9.4)
Energy and fatigue	11 (15.6)	40 (60.4)	13 (19.8)	2(3.1)	1 (1.0)
Sleep and rest	0	24(35.4)	12 (17.7)	29 (42.8)	2 (3.1)
Dependence on medication	1 (1.0)	12(18.85)	51 (76)	2(3.1)	1(1.0)
Mobility	1(1.0)	38 (57.3)	22 (32.3)	6 (9.4)	0
Activities of daily living	1(1.0)	36(54.2)	21(32.3)	8 (11.5)	1 (1.0)
Work capacity	2 (2.1)	40 (60.4)	16 (24)	9 (13.5)	0
<b>Psychological domain</b>					
Enjoy life	11(15.6)	19(29.2)	31(46.9)	5 (7.3)	1 (1.0)
Meaningful life	8(12.5)	19 (29.2)	30 (45.8)	5 (7.3)	4(5.2)
Self esteem	0	38 (57.3)	19(29.2)	8 (11.5)	2 (2.1)
Concentration	7 (10.4)	22 (33.3)	35 (52.1)	2(3.1)	1 (1.0)
Body image	8(11.5)	37 (57.3)	18 (27.1)	2 (2.1)	2 (2.1)
Negative feeling	1 (1.0)	5 (7.3)	33(49)	8(12.5)	20 (30.2)
<b>Social relationships</b>					
Personal relationships	0	30 (45.8)	28 (41.7)	8 (11.5)	1 (1.0)
Sex	1 (1.0)	25 (39.6)	38 (56.3)	2 (2.1)	1 (1.0)
Social support	2 (2.1)	14(21.9)	17 (25.0)	32 (47.9)	2(3.1)
<b>Environment</b>					
Financial resources	7 (9.4)	30(44.8)	26 (39.6)	3 (5.2)	1 (1.0)
Information and skills	2 (3.1)	28 (41.7)	34 (50.0)	3 (5.2)	0
Recreation and leisure	3 (4.2)	28 (41.7)	33 (49.0)	3 (5.2)	0
Home environment	0	8 (13.5)	22 (32.3)	35(52.1)	2 (2.1)
Access to health and social care	0	3 (5.2)	13(18.8)	49 (74.0)	2 (2.1)
Physical safety and security	7 (10.4)	21 (31.3)	37(55.2)	0	2 (3.1)
Physical environment	2 (2.1)	22 (32.3)	37 (57.3)	4 (6.3)	2 (2.1)
Transport	0	5(8.3)	20 (29.2)	40 (59.4)	2 (3.1)

## 5. DISCUSSION

- 1. Quality of life according to age:** Quality of life of study subjects were high in the age group of 45 years or less than 11.5% and less in the age group of 46 to 65 years which is 60.4%.
- 2. Quality of life according to sex:** Quality of livescore for the mails were 52 52 which is 78.1% and for females were 15 which is 21.9%.
- 3. Quality of life according to locality:** In this study we found that patients from urban area 67.7% had better quality of life than with ruler area 32.3%.

4. **Quality of life according to educational status:** In this study we have seen that patients with educational knowledge had better quality of life as compared with the illiterate.
5. **Quality of life according to MCA in fact:** Patients had better quality of life in right MCA infract than left MCA infract.
6. **Quality of life according to alcoholism:** In this present study we found that patients who have never consumed alcohol have better quality of life than former and ever consumed individuals.
7. **Quality of life according to smoking:** Almost similar quality of life score is observed in ever smoked and never smoked individuals.
8. **Quality of life according to hypertension:** In this we have noticed that individuals with normal blood pressure were having better quality of life than prehypertensive or hypertensive.
9. **Quality of life according to duration of stroke:** In this present study we have noticed that new cases 17.1% had better quality of life than old cases 82.3%.

#### **Summary for various items according to 4 domains of quality of life**

Majority of the patients described the general quality of life to be poor with 60.4% and majority of the stroke patients with 59.4% describe their general health as dissatisfied.

#### **1. Physical domain**

Nearly 50% of patients were having very much pain and this comfort and 39% were having moderate pain and discomfort. In energy and fatigue, 15.6% of patients were having no energy and 60.4% were having little energy of work and activities in daily living. Around 35.4% were satisfied, 17.7 percent neither satisfied nor dissatisfied and 42.8 were satisfied with sleep and rest. About 76% were moderately and 18.85% were a little dependence on medication. For mobility 57.3% of the stroke patients were described as poor, 32.3% as neither poor nor good and only 9.4% as good mobility. When activities of Daily living were assessed, 54.2% were dissatisfied, 32.3% were neither satisfied nor dissatisfied 11.5% were satisfied and only one percent were very satisfied. With work capacity 60.4% were satisfied, 24% were neither satisfied nor dissatisfied and 13.5% were dissatisfied.

## 2. Psychological domain

About 16% did not enjoy life and only 46.5% moderately enjoyed their life. Around 45.8% of stroke patients felt that they had a moderate meaningful life. Only, 11.5% of the stroke patients had a satisfied self esteem. Hardly 5% of the stroke patients has satisfied concentration ability. Around 84.4% of stroke patients had little to moderate acceptance of their bodily appearance. Around 93% of patience has negative feeling.

## 3. Social relationship

Only 11% of the stroke patients had a satisfied personal relationship and 4% had a satisfied sexual life. Around 48% of the stroke patience describe to have a satisfied social support.

## 4. Environmental domain

Around 84.4% of propations had either little to moderate financial support. Almost 91.7% of the stroke patients received either little or moderate information and skills for day to day life. Only 46.9% of the stroke patients had little opportunity for leisure activities. only 52.1% half of the stroke patients were satisfied with their home environment. Majority i.e 74% described their access to health and social care to be satisfied. Majority i.e 55.2% described that they had a moderate amount of feeling of safe place in their daily life. Only 57.3% of stock patient describe to have a architectural barrier for healthy living. Only 59.9% describe to have satisfied with transport services.

## 6. CONCLUSION

One could argue that the concept of quality of life has multiple dimensions. Because strokes are among the most severe health conditions, affecting all facets of life in numerous and significant ways, assessing quality of life is crucial. Patients' physical, social, psychological, and environmental elements all affect their quality of life. Every effort should be made to enhance these factors, which will therefore enhance everyday living and the general quality of life for stroke patients.

Subsequently, managing these aspects with the help of rehabilitation programs by multidisciplinary teams, will result in healthier outcomes in terms of therapeutic efficacy and improvement in patients psychosocial aspects and satisfaction.

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