



Quality of Life after Chronic Post Stroke Patients

Ihsanullah Rajar^{1*}, Ashok Kumar², Kamlesh Kumar Ahuja³, Asif Gulzar Shaikh²,
Rizwan Channa⁴ and Asiya Parveen Shaikh⁵

¹Department of Medicine, LUMHS, Jamshoro, Pakistan

² Institute of Physiotherapy and Rehabilitation Sciences, LUMHS, Jamshoro, Pakistan

³ Department of Medicine, Chandka Medical College and Hospital, SMBBM University, Larkana, Pakistan

⁴Senior Registrar of Medicine, BDMC, Mirpurkhas

⁵Department of forensic medicine LUMHS Jamshoro/Hyderabad

*Corresponding e-mail: sirfaraz980@gmail.com

ABSTRACT

Background/objectives: To assess the quality of life among patients presented with chronic post-stroke patients in our population. **Materials and methods:** This was a survey type study conducted at medicine department of Liaquat University of Medical and Health Science. Study duration was six months from June 2014 to November 2015. All the patients with the chronic stage of stroke, age 20 to 60 years and patient should not have any disability other than stroke were included study. Patient's demographic data and information regarding quality of life was assessed by self-aided questioner. Data were analyzed by SPSS version 16.0. **Results:** Total 100 cases were selected in the study, their mean age was 45.35±3.4 years, most of the cases 73 (73.0%) were with right side affected by stroke. Majority of the cases 47 (47.0%) had acceptable health and 18 (18.0%) patient's health was poor. 66 (66.0%) patients presented with a history of previous stroke. Most of the patients were moved by help of someone, almost half of patients can move by himself, few patients can't move and they were completely dependent on others. When patients were interviewed psychologically 41 (41.0%) patients feeling lonely and 31 (31.0%) were depressed and unhappy, 19 (19.0%) had suicidal thought. When patients were interviewed regarding behavior with your family 36 (36.0%) answered as not good behavior of family members, these cases justified that they belong to the poor families and they are as a burden. **Conclusion:** It was concluded that there was poor quality of life among chronic post-stroke patients especially patients belongs to poor families.

Keywords: Chronic post-stroke, Quality of life, Severe disability

INTRODUCTION

Stroke, being the world's 3rd prominent factor of death as well as the most significant factor of adult-related severe disability [1], it is a major cause of functional inability. Neurological sequelae represent 90% cases of stroke, 1/3rd of them will be unable to reoccupy routine activities to the same degree as it was before suffering stroke [2,3]. The stroke's high rate was explained via cumulative prevalence 1 million people per year during 2002 in Catalonia and among populace over the age of 24 years of 127 cases among females and 218 fresh cases among males [4]. Its prevalence within Asia, as per a rough approximation, has been elevating in recent times. Within Asian nations, Pakistan shares a substantial challenging position of this distressing disorder, which plays a part in the outflow of resources concerning health services, society manpower, finances, and the economy in general [5,6]. Stroke's risk factors are generally categorized into non-changeable (ethnicity, sex, age, inherited diseases, low weight at birth) and changeable (cardiac disorders, diabetes mellitus, hypertension, alcohol abuse, dyslipidemia, smoking, use of birth control pills, metabolic syndrome, obesity, clinically asymptomatic carotid stenosis, hormone therapy among postmenopausal females, migraine, drug abuse, peripheral artery disorder, and other) [3-5]. Disability or nonexistence of disease has typically been considered as a physically fit state. Though, as society develops progressively further diverse and complex, homeostasis in different dimensions, together with psychological, physical, and social, has been considered as good wellbeing. That is to say that quality of life is gaining more attention Stroke leads to sufficient reduction in quality of life yet in people without any post-stroke disability [7-9]. It is getting further significant to monitor and enhance health-associated quality of life among people who survived stroke due to enhanced survival

after effective acute administration. Thus, stroke recovery has to be strategic to enhance the health-associated quality of life, and recognition of factors associated with the health-associated quality of life is essential to develop a valuable strategy [10]. The longstanding effects of stroke have been established. In North-western Nigeria, epidemiological studies regarding stroke have concentrated on risk factors and mortality profile however not on challenges associated with quality of life [11,12]. Stroke associated quality of life and life satisfaction following stroke are significant challenges of healthcare that have been lacking necessary attention [11,13]. There was nothing particular care-full facilities for disabled people to see their emotions and to fulfill their all wishes. Therefore this study has been conducted to assess the quality of life among patients presented with chronic post-stroke patients in our population. By this study awareness will increase regarding the feeling of accommodations of these people.

PATIENTS AND METHODS

This was a survey type study conducted at the medicine department of Liaquat University of Medical and Health Science. Study duration was six months from June 2014 to November 2015. All the patients with the chronic stage of stroke, age 20 to 60 years and patient should not have any disability other than stroke were included study. All the patients don't want to participate in the study were excluded. A self-made proforma was used to assess the quality of life among all patients. All the patients were interviewed regarding demographic characteristics, movement status, psychological status and behavior of family members. All the information was recorded in the proforma. Data were analyzed in SPSS version 16.0.

RESULTS

Total 100 cases were selected in the study, their mean age was 52.35±3.4 years, most of the cases 73 (73.0%) were more than 40 years of age, males were in majority 65 (73.0%) in contrast to females 35 (27.0%). Most of the patients had poor socioeconomic status 60 (60.0%), middle socioeconomic status 30 (30.0%) and 10 (10.0%) upper socioeconomic status. Most of the cases 73 (73.0%) were with right side affected by stroke, 27 (27.0%) had left side affected. According to the physical health on presenting time majority of the cases 47 (47.0%) had acceptable health, 18 (18.0%) patient's health was poor, while 25 (25.0%) patients were with good health and only 10 (10.0%) were presented with very good health and they were almost young cases. 66 (66.0%) patients presented with history of previous stroke, while 26 (26.0%) had no history of previous any neurological disorder (Table 1).

Table 1 Demographic characteristics of patients (n=100)

Parameters	Frequency (%)
Age	
<40 years	27 (27.0%)
>40 years	73 (73.0%)
Gender	
Male	65 (73.0%)
Female	35 (27.0%)
Side of Body Affected by Stroke	
Right side	73 (73.0%)
Left side	27 (27.0%)
Socioeconomic Status	
Poor	60 (60.0%)
Middle	30 (30.0%)
Upper	10 (10.0%)
Physical Health at Present	
Very good	10 (10.0%)
Good	25 (25.0%)
Acceptable	47 (47.0%)
Poor	18 (18.0%)
History of Previous Stroke	
Yes	66 (66.0%)
No	26 (26.0%)
Do not know	8 (8.0%)

On interview regarding status of physical activities, most of the patients were moved by the help of someone, almost half of patients can move by himself, few patients can't move and they were completely dependent on others, while most of the patients can't do job and shopping independently, results showed in Table 2. When patients were interviewed psychologically 41 (41.0%) patients feeling lonely and 59 (59.0%) can sleep enough or properly, while 22 (22.0%) criticize by someone, 31 (31.0%) were depress and unhappy, 19 (19.0%) had suicidal thought and 65 (65.0%) had ability of coping (Table 2).

Table 2 Patient's distribution according to quality of life (n=100)

Status of Activities	Yes	No	Assistance (%)
Feed by your own self	22 (22.0%)	8 (8.0%)	70 (70.0%)
Transfer (bed to chair and back) by your self	33 (33.0%)	6 (6.0%)	61 (61.0%)
Dress up independently	23 (23.0%)	20 (20.0%)	57 (57.0%)
Go to wash room independently	38 (38.0%)	15 (15.0%)	47 (47.0%)
Groom by your own self (face, hair, Teeth)	27 (27.0%)	14 (14.0%)	59 (59.0%)
Up and down on stairs easily	12 (12.0%)	40 (40.0%)	48 (48.0%)
Go to your job or business	14 (14.0%)	50 (50.0%)	36 (36.0%)
Go for shopping	22 (22.0%)	44 (44.0%)	33 (33.0%)
Go to restaurant or coffee shop	9 (9.0%)	49 (49.0%)	40 (40.0%)
Attend any social organization (club or party)	16 (16.0%)	56 (56.0%)	28 (28.0%)
Psychological Status			
Feel lonely or remote from other people	41 (41.0%)	59 (59.0%)	0
Criticize by some one	22 (22.0%)	78 (78.0%)	0
Depress or unhappy	31 (31.0%)	69 (69.0%)	0
Suicidal thought at any stage	19 (19.0%)	81 (81.0%)	0
Sleep enough or properly	59 (59.0%)	41 (41.0%)	0
Have ability of coping	65 (65.0%)	35 (35.0%)	0

When patients were interviewed regarding behavior with their family 36 (36.0%) answered as not good behavior of family members, 64 (64.0%) were in good family behavior (Figure 1).

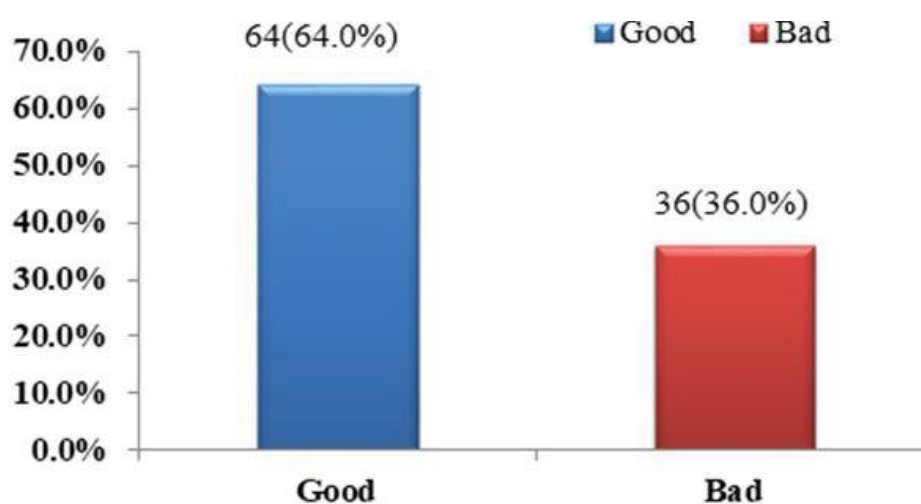


Figure 1 Behaviour with patients family

DISCUSSION

Quality of life had clear importance in chronic life-changing disorders as stroke with pervasive disabilities, it has not been investigated systematically or re-reported from settings of LMIC, where the stroke is the big public health issue, populations are susceptible and health-related system disorganized and unavailability of resources, which were necessary to chronic disease [14]. Around 78% of the population pay out of pocket for their health and there was nothing comprehensive rehabilitation units in Pakistan and no obvious examples of health care facility solutions for the chronic disabling diseases [15,16]. In this study most of the patients were above 40 years age and their mean age were 52.35 ± 3.4 years, these findings were similar to the study of Stücker, et al., as the mean age of stroke cases was 57.14 ± 13.34 years and males were in majority as 68%. In this series mostly 60 (60.0%) patients were poor socioeconomically [17]. Similarly Khan, et al., stated that most of them belonged to low socioeconomic status and almost 50% were having family history of stroke [18].

The impact of stroke on an individual is usually unanticipated, and its effects can be devastating. Depending on the severity and type, a stroke can leave a person with residual impairment of physical, psychological and social functions. The severity of disability depends upon the level of mobility, communication skills, or the degree to which behavioral and personality changes or cognitive deficit each individual. The occurrence of a stroke often has several negative consequences for the stroke survivor. Results of our study had shown that regarding the status of physical activities, most of the patients were moved by help of someone, almost half of the patients can move by himself, few patients can't move and they were completely dependent on others, while most patients can't do job and shopping independently. In comparison to our results, study conducted by Biegel, et al., and Schultz, et al., reported that increased dependency on others for activities of daily living, alteration in mood, and disruption in social interaction with family members have all been found in patients with stroke [19,20].

In our study, when patients were interviewed psychologically 41.0% patients feeling lonely and 59.0% can sleep enough or properly, while 22.0% criticize by someone, 31.0% were depressed and unhappy, 19.0% had suicidal thought and 65.0% had the ability to cope. Bartoli, et al., reported that there was strong association between mortality and post-stroke depression, and it has been stated that post-stroke depression has independent link with disabilities and very poor quality of life around one-year post-stroke [21,22]. Post-stroke depression has significant adverse impacts on the quality of life even after minor stroke. Studies reported that in the developed nation's high quality of life after stroke is linked with the non-dependent living best education, daily life, good socio-economic status, and improved social support while poor quality of life has been linked with the depression, fatigue and stress [22,23]. In a recent report, Sturm, et al., stated that depression is significant factor two years after stroke. The social relationship has probable for both health encouraging and health negative affects among old population, and so on there are biologically reasonable pathways for these effects. Such indication proposes that aspects of social communication could play the big role in the future health promotions efforts for old population, while careful thought of both potentially positive as well as negative social influences are needed [24].

CONCLUSION

It was concluded that there was poor quality of life among chronic post-stroke patients especially those belongs to poor families. There was big rate of stress, which is negatively impacted on disease improvement. Strategies should be developed to encourage the dependable population for normal life survival to improve the disease and decrease the morbidity and mortality.

DECLARATIONS

Conflict of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

REFERENCES

- [1] Kuklina, Elena V., et al. "Epidemiology and prevention of stroke: A worldwide perspective." *Expert review of neurotherapeutics*, Vol. 12, No. 2, 2012, pp. 199-208.
- [2] Kalaria, Raj N. "Cerebrovascular disease and mechanisms of cognitive impairment: Evidence from clinicopathological studies in humans." *Stroke*, Vol. 43, No. 9, 2012, pp. 2526-34.

- [3] Arboix, Adrià. "Cardiovascular risk factors for acute stroke: Risk profiles in the different subtypes of ischemic stroke." *World Journal of Clinical Cases*, Vol. 3, No. 5, 2015, p. 418.
- [4] Marrugat, Jaume, et al. "The estimated incidence and case fatality rate of ischemic and hemorrhagic cerebrovascular disease in 2002 in Catalonia." *Revista Española de Cardiología*, Vol. 60, No. 6, 2007, pp. 573-80.
- [5] Wu, Xiaomei, et al. "Prevalence, incidence, and mortality of stroke in the Chinese island populations: a systematic review." *PLoS One*, Vol. 8, No. 11, 2013, p. e78629.
- [6] Khan, M. Ishaq, et al. "The epidemiology of stroke In a developing country (Pakistan)." *Pakistan Journal of Neurological Sciences*, Vol. 13, No. 3, 2019, pp. 30-44.
- [7] Claire L. Allen, and Ulvi, Bayraktutan. Risk factors for ischemic stroke. *International Journal of Stroke*, Vol. 3, No. 2, 2008, pp. 105-16.
- [8] Kim, Won-Ock, et al. "Relationships among activity of daily living, depression, and quality of life (QOL) in patients with stroke." *Journal of East-West Nursing Research*, Vol. 13, No. 2, 2007, pp. 138-46.
- [9] Lai, Sue-Min, et al. "Persisting consequences of stroke measured by the stroke impact scale." *Stroke*, Vol. 33, No. 7, 2002, pp. 1840-44.
- [10] Kwon, SuYeon, et al. "Health-related quality of life and related factors in stroke survivors: Data from Korea National Health and Nutrition Examination Survey (KNHANES) 2008 to 2014." *PloS one*, Vol. 13, No. 4, 2018, p. e0195713.
- [11] Abubakar, S. A., and S. A. Isezuo. "Health related quality of life of stroke survivors: experience of a stroke unit." *International Journal of Biomedical Science*, Vol. 8, No. 3, 2012, p. 183.
- [12] Abubaka, S. A., G. H. Yunusa, and S. A. Isezuo. "Predictors of 30 days outcome of patients with acute stroke in Sokoto." *Sahel Medical Journal*, Vol. 13, No. 2, 2010.
- [13] Owolabi, Mayowa Ojo. "Determinants of health-related quality of life in Nigerian stroke survivors." *Transactions of the Royal Society of Tropical Medicine and Hygiene*, Vol. 102, No. 12, 2008, pp. 1219-25.
- [14] Nishtar, Sania, et al. "Health reform in Pakistan: A call to action." *The Lancet*, Vol. 381, No. 9885, 2013, pp. 2291-97.
- [15] Khalid, Wardah, et al. "Quality of life after stroke in Pakistan." *BMC Neurology*, Vol. 16, No. 1, 2016, p. 250.
- [16] Nishtar, Sania, et al. "Pakistan's health system: Performance and prospects after the 18th Constitutional Amendment." *The Lancet*, Vol. 381, No. 9884, 2013, pp. 2193-06.
- [17] Stückle, Druckerei. "Asia Pacific Stroke Conference 2016. Abstracts of the Annual Conference of the Asia Pacific Stroke Organization (APSO) Combined with stroke society of Australasia, Brisbane, Qld., Australia, July 14-17, 2016: Abstracts." *Cerebrovascular Diseases*, Vol. 42, No. 1, 2016, pp. 1-157.
- [18] Khan, N. I., et al. "Ischemic stroke: prevalence of modifiable risk factors in male and female patients in Pakistan." *Pakistan Journal of Pharmaceutical Sciences*, Vol. 22, No. 1, 2009.
- [19] Biegel, David E., Esther Sales, and Richard Schulz. "Family caregiving in chronic illness: Alzheimer's disease, cancer, heart disease, mental illness, and stroke." *Sage Publications, Inc*, 1991.
- [20] Schultz, Susan K., et al. "Generalized anxiety and depression: Assessment over 2 years after stroke." *The American Journal of Geriatric Psychiatry*, Vol. 5, No. 3, 1997, pp. 229-37.
- [21] Bartoli, Francesco, et al. "Depression after stroke and risk of mortality: A systematic review and meta-analysis." *Stroke Research and Treatment*, 2013.
- [22] Batool, K., S. Ehsan, and U. Maqsood. "Effect of depression on stroke specific quality of life: A survey in urban settings of Lahore City." *Electronic Journal of Biology*, Vol. 13, No. 4, 2017, pp. 391-94.
- [23] Kauhanen, Marja-Liisa, et al. "Domains and determinants of quality of life after a stroke caused by brain infarction." *Archives of Physical Medicine and Rehabilitation*, Vol. 81, No. 12, 2000, pp. 1541-46.
- [24] Sturm, Jonathan W., et al. "Quality of life after stroke: The North East Melbourne stroke incidence study (NEMESIS)." *Stroke*, Vol. 35, No. 10, 2004, pp. 2340-45.