

HEALTH-RELATED QUALITY OF LIFE IN STROKE PATIENTS

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Abstract:

Background:Stroke is an episode of acute neurological dysfunction presumed to be caused by ischemia or haemorrhage. Affection to brain make lead to various systems function being hampered leading to various symptoms and so increasing the dependence on others for activities. Checking the most affected component and treating it accordingly and so deciding the quality of life in patients.**Aim and objectives:** To assess quality of life in stroke patients and to check components affected the most.**Methodology:** 30 Patients of stroke were selected according to Glasgow coma scale and Mini mental scale examination scores

criteria and informed consent was taken. Questionnaire of SF-36 was filled by them and accordingly results were interpreted. SF-36 includes eight different components affected due to stroke and so results were calculated.**Result:** SF-36 questionnaire was interpreted and scores were divided into groups according to scores, 25-49 were 9, 50-75 were 21, thus indicating disability. The eight different components were scored individually and interpreted. **Conclusion:** 70% of individual had mild disability and 30% had moderate disability. Vitality, physical functioning and mental health are most affected components. Quality of life after stroke is ham-

pered with disability.

Keywords: Stroke, quality of life, components.

Introduction:

Stroke is a major, chronically disabling neurologic disease that often radically and permanently changes the lives of its victims. Medical treatment and occupational and physical therapy have been used to help stroke patients. [2] Stroke is the third leading cause of disability. It affects 700,000 individual each year, about 500,000 are new stroke and 200,000 recurrent strokes. Incidence is about 1.25 times greater for males than females.

Incidence increases with age, doubling after 65 years of age. About 22 percent of men, 25 percent of women with initial stroke will die within 1 year. [1]

Studies examining quality of life among patients sustaining a stroke have shown that stroke has a detrimental effect on both short-term and long-term health-related quality of life (HRQoL) and that disability is a strong determinant of HRQoL among this group. [10]

The experience of low mood and sub-syndromal or minor depression in stroke survivors can continue to impact life after stroke. Stroke survivors with a positive self-efficacy report higher QOL and fewer depressive symptoms. [8]

Reliability is the extent to which a measure is free from random error in the population of interest. [6] Post

stroke fatigue is associated with poorer HRQoL in chronic stroke. It was an independent predictor of HRQoL. [9]

There is some evidence that certain determinants of HRQoL in stroke also change with time. [9]

SF-36 scale is indicator of overall health status, of which various studies done examined the reliability exceeding 0.80, and that the reliability in physical and mental sections are above 0.90 and scale is well validated. [16] Scale contains eight components, vitality, physical functioning, bodily pain, general health perception, physical role functioning, emotional role functioning, social role functioning, and mental health. The individual component has different questions related to health perception and function, and accordingly contains the score. Maximum score was from 0-100, highest score indicating less disability and lower scores with more disability. It was found that the emotion, depression, fatigue interfere with patients health and so scoring less.

With assessing proper components which are affected, can be helpful tool in planning proper interventions. The physical functioning after stroke is severely affected thus increases necessity of physiotherapy management and supporting and re-educating person his daily activities.

The importance of HRQoL as a primary outcome of rehabilitation and exercise training programs for stroke survivors. [7] According to the definition proposed by the World Health

Organization, stroke fatigue is associated with poorer HRQoL in chronic stroke. It was an independent predictor of HRQoL. [9] There is some evidence that certain determinants of HRQoL in stroke also change with time. [9] SF-36 scale is indicator of overall health status, of which various studies done examined the reliability exceeding 0.80, and that the reliability in physical and mental sections are above 0.90 and scale is well validated. [16] Scale contains eight components, vitality, physical functioning, bodily pain, general health perception, physical role functioning, emotional role functioning, social role functioning, and mental health. The individual component has different questions related to health perception and function, and accordingly contains the score. Maximum score was from 0-100, highest score indicating less disability and lower scores with more disability. It was found that the emotion, depression, fatigue interfere with patients health and so scoring less. With assessing proper components which are affected, can be helpful tool in planning proper interventions. The physical functioning after stroke is severely affected thus increases necessity of physiotherapy management and supporting and re-educating person his daily activities.

Organization in 1970, "stroke is rapidly developing clinical signs of focal (or global) disturbance of cerebral function, with symptoms lasting 24 h or longer, or leading to death, with no apparent cause other than of vascular origin." [3] Recently, a new definition of stroke has been proposed by the American Stroke Association which is tissue-based and states that "stroke is an episode of acute neurological dysfunction presumed to be caused by ischemia or haemorrhage, persisting ?24 hours or until death." [3] Stroke rehabilitation has patient-focused interventions to reduce severity of disability, which has resulted in increasing number of disabled patients managed at home. [1] Stroke affects the brain circulation leading to various impairments which affects patient's daily living activities. Stroke is a major, chronically disabling neurologic disease that often radically and permanently changes the lives of the victims. Assessing quality of life and checking the components affected is needed to plan proper intervention programs. Various studies are done in relation to this topic but it was needed to assess the exact component affected for better rehabilitation of the patient to improve the health related quality of life.

Methodology

Survey design was done. 30 patients from hospitals in pune were taken under inclusion criteria of GCS score

more than 12, MMSE score more than 25, both male and female and exclusion criteria including unconscious patients with SF-36 questionnaire as outcome measure. Patients were selected according to inclusion criteria and were evaluated using SF-36 questionnaire, questionnaire include eight components related to health status and has various questions under each component and are scored according to the response by patients about their perception. Total score is from 0-100, highest score indicating no disability and lower score indicating disability.

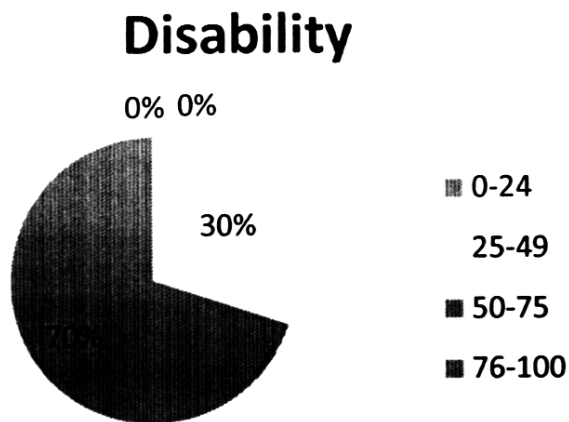
Results:

Graph No.-1 represents the division of scoring of SF-36 questionnaire. Patients of score of that between 25-49 of SF-36 questionnaire were 9 indicating 30% of disability. Patients scoring between 50-75 of SF-36 questionnaire was 21 indicating 70% of total disability, represents the percentage of disability according to score of SF-36 scale. Graph No.-2 represents the eight components and so indicating the scores and components affected most, and so represents patients had significantly lower scores on vitality, physical functioning and mental health indicating disability.

Discussion:

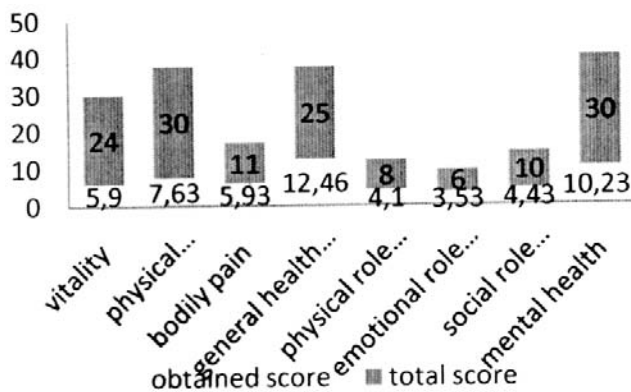
The aim of the study was to assess the health related quality of life in stroke patients, create awareness for maintaining exercise and explain the

Graph No. 1: Disability according to scoring of SF-36 scale



questionnaire. This scale is indicator of overall health status, of which various studies done examined the reliability exceeding 0.80, and that the reliability in physical and mental sections are above 0.90 and scale is well validated. Scale contains eight components, vitality, physical functioning, bodily pain, general health perception, physical role functioning, emotional role functioning, social role functioning, mental health.

Graph No. 2: Components affected due to stroke



The individual component has different questions related to health perception and function, and accordingly contains the score. Maximum score was from 0-100, highest score indicating less disability and lower scores with more disability. It was found that the emotion, depression, fatigue interfere with patients health and so scoring less. With assessing proper components which are affected, can be

consequences of the same, modify the risk factors associated and which may be fatal for their health. The study was done on 30 individual patients with stroke from four weeks to one year. They were selected according to inclusion criteria, that there GCS and MMSE score to be in normal range. They were evaluated for their health related quality of life interpretation. Outcome measure used was SF-36

helpful tool in planning proper interventions. The physical functioning after stroke is severely affected thus increases necessity of physiotherapy management and supporting and re educating person his daily activities. Study results interpreted from graph 1, that health related quality of life in stroke patients is low, indicating disability and role in society to be affected. The score out of hundred was

interpreted, as patients with score between 25-49 presented were 9 (30%) concluding, having moderate disability. Other patients scoring with in 50-75 were 21 (70%) concluding having mild disability.

The eight components were scored individually, in graph 2, vitality (24%), physical functioning (25.43%), bodily pain (53.90%), general health perception (49.84%), physical role functioning (51.25%), emotional role functioning (58.83%), social role functioning (44.3%), and mental health (34.1%). From above results, it is concluded that components affected from highest to lowest are vitality, physical functioning, mental health, social role functioning, general health perception, physical role functioning, bodily pain, emotional role functioning.

Studies done in past have showed the same results, showing agreement. one study showed the major decrease in physical functioning, and smaller difference in social role functioning and general health and role limitations due to emotional problems, as same was the result of these study. Some studies proved that the motor function and activities shows a pattern of improvement up till three to six months after stroke, peak of performance and optimal functioning is established at six months after stroke. And this regained performance is dependent on maintenance of capacities and activities to be sustained, and if training is not maintained, the performance may

deteriorate, thus concluding to maintain exercise and training set protocol.

Conclusion:

The study concluded that 30% patients were having moderate disability and 70% having mild disability. The components affected were vitality, physical functioning and mental health.

Limitation of study:

"Small sample size.

"No type of stroke was included.

"Total duration of intervention was not included.

Future scope of study

"Type of stroke can be included.

"Sample size can be larger.

"Type and duration of intervention can be included

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