

A STUDY ON THE CHANGE IN QUALITY OF LIFE AND CARE AFTER STROKE IN NICHANI'S HOSPITAL AT ROYAPURAM

P. JAIPRAKASH, Assistant Professor, Department of Service Learning,
S. JOHN KAVIARASU, Assistant Professor, School of Human Excellence,
Dr. JETSON SATYA GOSPEL, Assistant Professor, Department of Social Work,
Loyola College (Autonomous), Chennai, Tamil Nadu, India.

EXECUTIVE SUMMARY

Contextual Background: Stroke, or a cerebral vascular accident, is the sudden death of brain cells due to inadequate blood flow. The WHO clinically defines stroke as the rapid development of clinical signs and symptoms of a focal neurological disturbance lasting more than 24 hours or leading to death with no apparent cause other than vascular origin'.(WHO, 2005). Stroke is a clinical syndrome divided into two broad categories that define its pathophysiology:

Research Methods and Materials: The design of the study was descriptive in nature. 50 respondents were drawn from different sections of the organization by applying simple random sampling technique. Each respondent was met individually and data was collected, using interview schedules. The data thus collected were processed by computing percentages.

Results / Findings: The researcher has found that the majority of the respondents has moderately agreed that they feel withdrawn from others because most of the patients stays at home and avoids contact with others.

Conclusion: The onset of stroke is a dramatic and discouraging event both for the person having the stroke and their family. A person may go from complete independence to complete dependence in a matter of minutes. Upon entering the medical system, patients are confronted with a bewildering array of tests, people, and places, as well as confusion about treatment and services.

Keywords: Brain Cells, Stroke, Pathophysiology, Development, Dependence, Complete Dependence, Treatment and Thrombolysed Patient

1. INTRODUCTION

1.1. Stroke: Stroke, or a cerebral vascular accident, is the sudden death of brain cells due to inadequate blood flow. The WHO clinically defines stroke as the rapid development of clinical signs and symptoms of a focal neurological disturbance lasting more than 24 hours or leading to death with no apparent cause other

than vascular origin'.(WHO, 2005). Stroke is a clinical syndrome divided into two broad categories that define its pathophysiology:

1. Ischaemic strokes are caused by either cerebral thrombosis or embolism and account for 50%–85% of all strokes worldwide. (Feigin 2009)
2. Haemorrhagic strokes are caused by subarachnoid haemorrhage or intracerebral haemorrhage and account for 1%-7% and 7%-27% respectively of all strokes worldwide. (Feigin 2009).

After stroke, the patients will end with disability on one side part of the body or disability in many parts of the body. In which if the right side brain function is affected then the left side of body control gets affected those includes Music/Art awareness, Synthesizing, Subjectivity, Imagination, Intuition, Creativity, Emotion, Face recognition, 3-D shapes. If the left side brain function is affected then the right side of the body control gets affected and those includes Number skills, Math/Scientific skills, Analytical, Objectivity, Written language, Spoken language, Logical reasoning. If the patient loses right side body control then it is said as Hemiparalysis and if loses the left side body control then said as hemiplegia At the stage of rehabilitation the physiotherapist make the patients train on motor skills like fine motor and gross motor skills.

1.2 Prevalence/incidence rate of stroke in India: Prevalence data for stroke are limited and are confined to studies that suffer from frequent bias, small and variable sample sizes, and inconsistent diagnostic criteria. (Gupta 2008, Nagaraja 2009) Most of the studies are cross-sectional in nature and primary objectives in each of these studies are diverse. Nevertheless, it has been estimated that the crude prevalence rate in India for stroke varies according to region. The crude prevalence rate appears to be higher in urban compared to rural populations.

The female with stroke:

Several studies have found that women who survive stroke less favorable outcomes than their male counterparts. Women are less likely to be discharged home than men and are more likely to have physical impairment. Women overall compared with males, females had lower functional recovery and poorer. Females have lower score physical function, Thinking, Language and energy domains.

2. STATEMENT OF THE PROBLEM

Stroke is a life-changing event that affects not only the person who is disabled, but also affects their family and caregivers. It is a myth that the patients with poor socio-economic status are affected by stroke in which they may lack psychological and emotional support and it leads to increase depression, guilt, sadness, helplessness, hopelessness and thought of being a burden to the family and this may lead them to suicidal thoughts. This study attempts to determine the problem of the stroke patient and the caretaker and also to

know that the caretakers are educated about the patients sickness, proper diet and also about the causes of the sickness and also attempts to look after the men and female caretakers in which there is a necessity of that the men of the house hold to take care of their wife. This study will help us to understand the problems faced by the stroke patients, caretakers and the awareness provided for the people about stroke and disability.

3. NEED OF THE STUDY

Stroke is a life-changing event that affects not only the person who may be disabled, but their family and caregivers. The Heart and Stroke Foundation of Canada (2003) estimates that there are approximately 50,000 new strokes in Canada each year, although precise estimates are difficult to obtain. Every ten minutes someone in Canada suffers from a stroke. Utility analyses show that a major stroke is viewed by more than half of those at risk as being worse than death. (AHA 2006)-Overall in India, the adjusted annual incidence (per 100,000 persons) of stroke is 124 in rural area (Bhattacharya, 2005) and 145 in urban area (Das, 2007). Overall in India, the adjusted annual incidence (per 100,000 persons) of stroke is 124 in rural area (Bhattacharya 2005) and 145 in urban area (Das 2007). This study would help the researcher to identify the effects and causes of stroke which affects their physical, mental, emotional, psychological and their coping pattern.

The World Health Organization (WHO, 2008) predicts that disability-adjusted life years lost to stroke will rise from 38 million in 1990 to 51 million in 2020. Disability caused by stroke has a massive impact on the patient, with social consequences and physical consequences of stroke being equally devastating. Stroke survivors are often greatly challenged by post-stroke depression, which can lengthen rehabilitation and recovery time considerably. Apart from having a deep impact on the survivors themselves, post-stroke depression also affects family and friends. Many stroke survivors experience feelings of hopelessness, helplessness, anxiety, and dehumanization. After a stroke, quality of life (QoL) is reported to decrease by more than 40% compared with pre-stroke QoL. This reduction is pronounced, even when no or minimal physical impairment is present.

Ferrell and colleagues¹⁰⁶ examined the impact of pain education on family caregivers who were providing care to elderly patients with cancer. The pain education program included pain assessment, pharmacologic interventions, and nonpharmacologic interventions. The pain education program helped improve caregivers' knowledge and attitudes about managing their family members' pain. Other researchers have found that interventions to build skills and problem-solving abilities help caregivers of persons with Alzheimer's disease by decreasing negative behavior in those they care for.¹⁰⁷ Weekly telephone interventions to help caregivers of stroke survivors problem-solve led to reduced depression.

McCrum reflects on the loss of a former self and the efforts to stick the pieces back together: the cruel fact is that this former self is irretrievably shattered into a thousand pieces, and try as one may to glue those pieces back together again, the reconstituted version will never be better than a cracked, imperfect assembly, a constant mockery of one's former, successful individuality' (p. 151).

4. MAIN OBJECTIVES

To know the lifestyle and the problems faced by the patients and their care after affected by stroke.

4.1. Specific Objectives

1. To know the demographic details of the patients.
2. To know about their physical problems.
3. To know their psychological and emotional status.
4. To know their coping pattern.

5. RESEARCH METHODS AND MATERIALS

The researcher adopted **descriptive design** which describes the existing events and situations of the patients who need family support to recover. More so, it aims at describing accurate character of particular patients and their family support system. This study was carried out in Nichani's Hospital, located in No.7, Arthoon Road, Royapuram, Chennai -13. The research was done among the stroke patients at Nichani's hospital who have 10 patients coming for consultation each day from different places of the country including rural and urban places. Primary data was collected from **50 male and female stroke patients** through convenient sampling technique during the month of August and September 2015. The tool employed for data collection was the **Interview Schedule**, which had Stroke Specific Quality of Life Scale (SS-QOL) scales with a view to knowing about the patients/respondents motor functions, coping pattern, energy level, mood, personality, social roles etc. Secondary data used for this study were from books, magazines, reports and articles from the Internet.

6. ANALYSIS AND INTERPRETATION OF MAIN FINDINGS

Table: 1 Gender of the respondents

Gender	Frequency	Percentage
Male	25	50
Female	25	50

Total	50	100
-------	----	-----

There were equal number of male and female respondents (50%) studied in this research.

Caretaker of the respondents

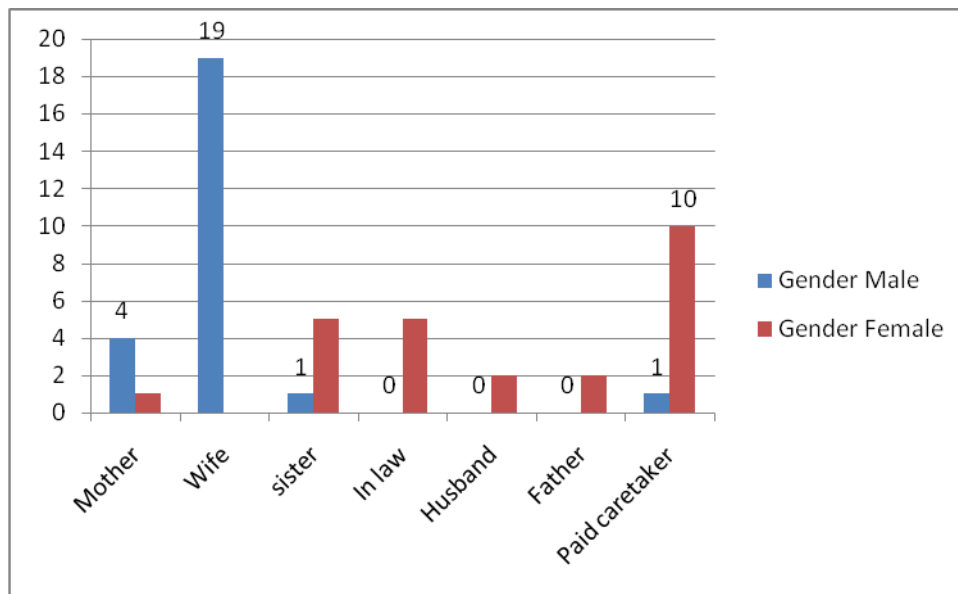


Figure 1

The majority of the male patients (19%) are given care by their wife, 4% male are given care by their mother and 1% by their sister and paid caretaker respectively. Whereas in the case of female patients, the majority of the female patients (10%) are given care by the paid caretakers, 5% of them by their sister and in law respectively, 2% of them are given care by their husband and father, 1% of them are taken care by their mother. It is therefore inferred that the majority of the male patients are taken care by their wife and the majority of female patients (10%) are taken care by the paid caretakers.

Table – 2 Caretaker educated on disability

Educated caretaker on disability	Frequency	Percentage
Yes	38	76
No	12	24
Total	50	100

The above table represents that every caretaker needs to be educated on the patient disability. The majority 76% of the respondents have said that their caretaker is educated about the patient disability and the remaining 24% of the caretakers are not educated about the disability of the respondents. As the table

shows, the majority 76% of the respondents have said that their care taker is educated on the patient disability and so they can be treated properly.

Table: 3 Knowledge about diet of the respondents

Knowledge about diet	Frequency	Percentage
Yes	32	64
No	18	36
Total	50	100

This table clearly implies the knowledge about the diet pattern for the caretaker. The majority 64% said that they follow the proper diet and 36% are not aware of their diet pattern. It is found that the majority of the respondents had the knowledge about their diet pattern which helps them to stay fit and recover soon.

Table: 4 The respondents who did not join in activities

Did not join in activities	Frequency	Percentage
Strongly agree	7	14
Moderately agree	17	34
Neither agree nor disagree	5	10
Moderately disagree	16	32
Strongly disagree	5	10
Total	50	100

The above table clearly implies the respondents who did not join in activities just for fun with their family. The majority 34% of the respondents have moderately agreed, 32% moderately disagreed, 14% has strongly agreed and 10% of the respondents neither agree nor disagree and strongly disagreed respectively. The researcher has found that the majority 34% of the respondents moderately agreed that they don't join in activities with their family for fun because they may feel insecure and they are not interested in taking a role in their family.

Table – 6 Felt as a burden to the family

Felt as a burden to the family	Frequency	Percentage
Strongly agree	14	28
Moderately agree	18	36
Neither agree nor disagree	10	20
Moderately disagree	8	16
Total	50	100

The above table clearly implies the respondents who feel themselves as a burden to the family. The majority 36% of the respondents have moderately agreed, 28% have strongly agreed, 20% has neither agree nor disagreed and 16% of the respondents moderately disagreed the statement. The researcher has found that the majority 36% of the respondents has strongly agreed that they feel themselves as a burden to their own family because of their physical condition interferes their life style and affects their family roles and the responsibility in taking care of the patient makes themselves feel as a burden whereas the other 16% of the respondents have moderately disagreed because of their positive attitude and also because of more emotional support by their family.

Table – 7 Physical condition interfered personal life of the respondents

Physical condition interfered personal life	Frequency	Percentage
Strongly agree	11	22
Moderately agree	18	36
Neither agree nor disagree	11	22
Moderately disagree	8	16
Strongly disagree	2	4
Total	50	100

The above table clearly implies the respondents who feel that their physical condition interfered with their personal life. The majority 36% of the respondents have moderately agreed, 22% have strongly agreed and neither agree nor disagree respectively, 16% of the respondents moderately disagreed and 4% of the respondents has strongly disagreed. The researcher has found that the majority 36% of the respondents has

moderately agreed that their physical condition interfered with their personal life because of their disability and being dependent towards others and it also made them disabled mentally which creates a negative behavior.

Table: 8 Others have trouble understanding the respondents

Having trouble in understanding the respondents	Frequency	Percentage
Strongly agree	10	20
Moderately agree	11	22
Neither agree nor disagree	9	18
Moderately disagree	8	16
Strongly disagree	12	24
Total	50	100

The above table represents that others have trouble understanding the patients' speech. The majority 24% of the respondents have strongly disagreed, 22% of the respondents have moderately agreed, 20% has strongly agreed, 18% has neither agree nor disagreed, 16% have moderately disagreed. The researcher has found that the majority 24% of others cannot understand the patients' speech because of their speech difference like getting stuck, stuttering and stammering in between their speech so the listeners feels difficult to understand them.

MOOD

The respondents' discouragement about their future

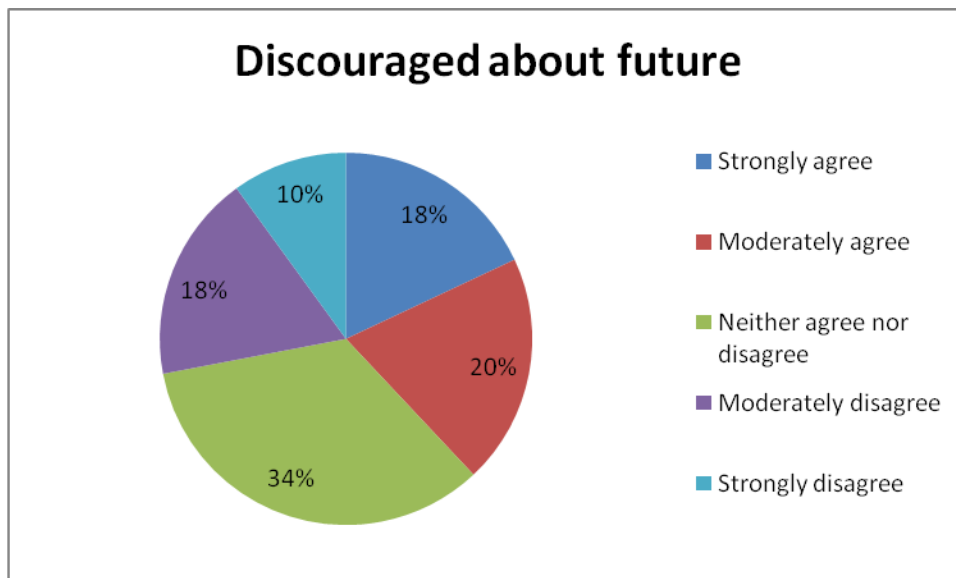
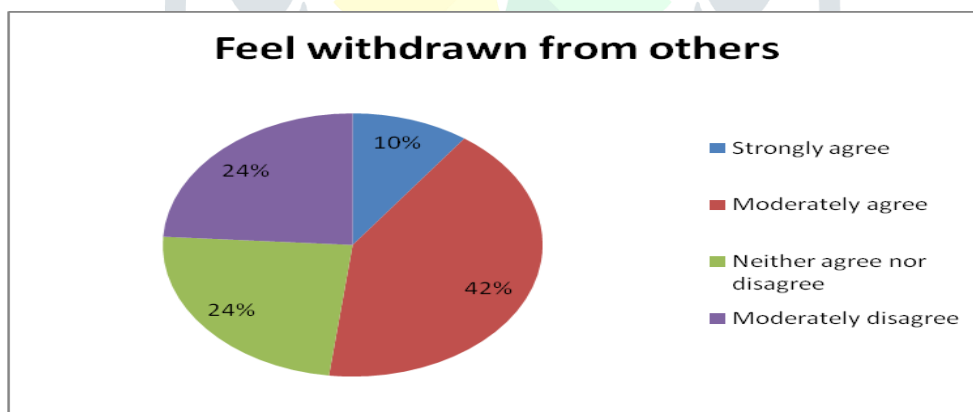


Figure 2

The above chart clearly implies the respondents who were discouraged about their future. The majority 34% of the respondents have neither agree nor disagree, 20% have moderately agreed, 18% strongly agree and moderately disagree respectively, 10% of the respondents strongly disagree. The researcher has found that the majority 34% of the respondents has said that they neither agree nor disagree, in which the patients are equally balanced with their mood and also equally encouraged about their future.

The respondents feel withdrawn from others



The above figure clearly implies the respondents who felt withdrawn from others. The majority 42% of the respondents have moderately agree, 24% have neither agree nor disagree and moderately disagreed respectively, 10% strongly agree. The researcher has found that the majority 42% of the respondents has moderately agree that they feel withdrawn from others because most of the patients stays at home and avoids contact with others and remaining 24% of the respondents who have moderately disagreed have a positive attitude towards others and so they do not feel withdrawn from others.

Confidence of the respondents

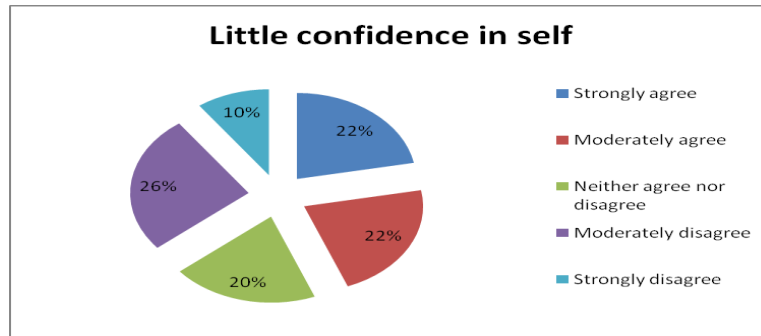


Figure 3

The above figure clearly implies the respondents who have little confidence on themselves. The majority 26% of the respondents have moderately disagree, 22% have strongly agree and moderately agree respectively, 20% have neither agreed nor disagreed, 10% of the respondents have strongly disagreed. The researcher has found that the majority 26% of the respondents has moderately disagree that they don't have confidence on themselves in which their cure is affected.

Change in personality of the respondents

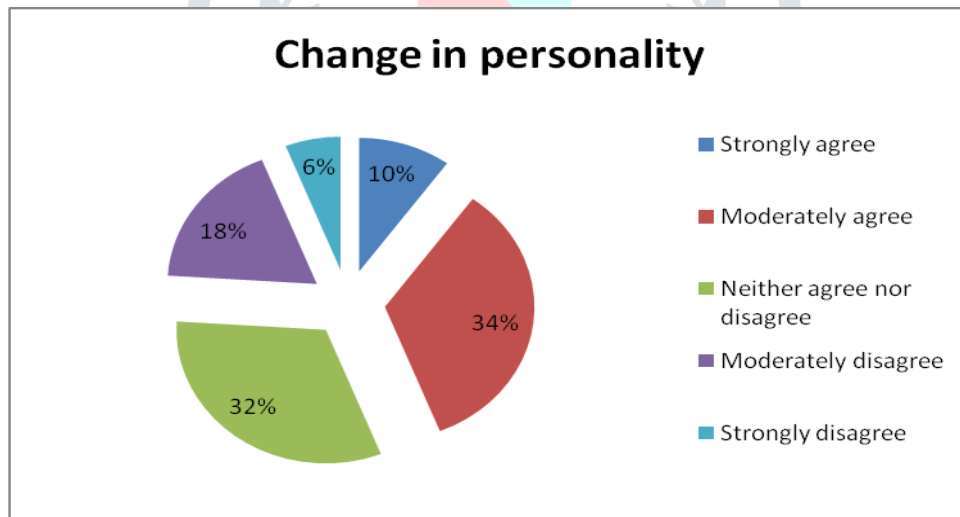


Figure 4

The above chart clearly implies the respondents who feel that their personality has changed. The majority 34% of the respondents have moderately agreed, 32% have neither agreed nor disagreed, 18% moderately disagreed, 10% of the respondents strongly agreed and 6% of the respondents has strongly disagreed. The researcher has found that the majority 34% of the respondents have moderately agreed that they have change in their personality because of their disability and only with the caretakers support and positive behavior can change their personality.

Table: 9 The respondents did not get opportunity to meet their friends

Did not get opportunity to meet my friends	Frequency	Percentage
Strongly agree	8	16
Moderately agree	18	36
Neither agree nor disagree	18	36
Moderately disagree	4	8
Strongly disagree	2	4
Total	50	100

The above table clearly implies that the respondents did not get any opportunity to meet their friends after being disabled. The majority 36% of the respondents have moderately agree and neither agreed nor disagreed respectively, 16% of the respondents have strongly agreed, 8% of the respondents have moderately disagreed, 4% of them strongly disagreed. As per the table, the majority 36% of the respondents have said that they did not get any opportunity to meet their friends because of their disability and it changes the individuals personality and sometimes it makes them isolated but the other 4% has strongly disagreed because their motor function is good and they also get opportunity to meet their friends often.

7. SUGGESTIONS AND CONCLUSIONS

7.1. Care givers Intervention

1. The entire family should support the patient not only physically and also their emotional support gives immediate recovery.
2. Proper diet patterns to be followed because it can also cause stroke because of over eating, obesity, diabetes, blood pressure.
3. Caretaker should have knowledge about the diet pattern and exercise to make the patients motor functions able.
4. Positive attitude towards the patient brings confidence on themselves and the cure is immediate.

7.2. Intervention by NGOs

1. The general public lacks knowledge about stroke so the NGO's should take steps to create awareness about the stroke.

2. To spread awareness about the causes, symptoms and problems associated with stroke and disability.

7.3. Social Workers' Intervention:

1. Every social worker in a medical setting should provide services to clients within the acute care setting, and no other types of setting.
2. They should be looking for on behalf of the patient focusing more on post stroke care.
3. They should provide training for care givers to work with stroke patients and with their care system.
4. They should identify the common mental health symptoms for someone who experienced stroke.
5. Should provide counseling services and support services.
6. Should have ability to support groups or individual and family counseling for patients.

7.4 Recommended management and treatment of stroke:

Early recognition and diagnosis of stroke using validated tools outside hospital environment can help save life and limit disability (NICE 2011). Specifically the Face Arm Speech and Time (FAST) test is a lay approach to diagnose stroke and is widely used to raise awareness about early recognition of stroke among the public in developed countries (Wall 2008). Acute management of stroke in hospitals includes confirmatory CT scan diagnosis and thrombolysis (NICE 2011). Proven treatments of acute thrombotic stroke include intravenous thrombolysis within 3 hours of onset of symptoms, use of aspirin within 48 hours and decompressive surgery for malignant middle cerebral artery infarction (Pandian, 2008). Thrombolysed patient are usually transferred to specialized acute stroke units where screening for swallowing and nutrition are done. Early mobilization is considered a priority in order to prevent disabilities and promote function (NICE 2011). Management of stroke patients in stroke units has also been shown to be effective in terms of recovery and return to active life (Pandian, 2008). Thrombolysed patients are expected to have early neurological recovery, reduced hospital stay and better functional outcomes at 3 months post stroke (Blinzer 2011). Post-acute management of stroke patients depends on the severity and site of lesion.

8. CONCLUSION

The onset of stroke is a dramatic and discouraging event both for the person having the stroke and their family. A person may go from complete independence to complete dependence in a matter of minutes. Upon entering the medical system, patients are confronted with a bewildering array of tests, people, and places, as well as confusion about treatment and services. Advances in acute treatment are saving the lives of people who would not have survived in the past. As a result, post stroke therapy is more important than ever. Yet

access to services and inconsistencies in healthcare professional knowledge about awareness, diet pattern, exercise and emotional support from family and care givers is essential.

9. REFERENCES

1. Adams, R. J., Albers, G., Alberts, M. J., Benavente, O., Furie, K., Goldstein, L. B., & Katzan, I. (2008). Update to the AHA/ASA recommendations for the prevention of stroke in patients with stroke and transient ischemic attack. *Stroke*, *39*(5), 1647-1652.
2. Albers, G. W., Bates, V. E., Clark, W. M., Bell, R., Verro, P., & Hamilton, S. A. (2000). Intravenous tissue-type plasminogen activator for treatment of acute stroke: the Standard Treatment with Alteplase to Reverse Stroke (STARS) study. *Jama*, *283*(9), 1145-1150.
3. Bisnaire, D. (1998). Nursing research in stroke. A review. *Axone (Dartmouth, NS)*, *20*(1), 10-13.
4. Dalal, P. M., Bhattacharjee, M., Vairale, J., & Bhat, P. (2008). Mumbai stroke registry (2005-2006)-surveillance using WHO steps stroke instrument-challenges and opportunities. *JAPI*, *56*, 675-80.
5. Dalal, P., Bhattacharjee, M., Vairale, J., & Bhat, P. (2007). UN millennium development goals: can we halt the stroke epidemic in India?. *Annals of Indian Academy of Neurology*, *10*(3), 130.
6. Dowswell, G., Lawler, J., Dowswell, T., Young, J., Forster, A., & Hearn, J. (2000). Investigating recovery from stroke: a qualitative study. *Journal of clinical nursing*, *9*(4), 507-515.
7. Ezzati, M., Lopez, A. D., Rodgers, A., & Murray, C. J. (2004). *Comparative quantification of health risks: global and regional burden of disease attributable to selected major risk factors*. OMS.
8. Feigin, V. L., Lawes, C. M., Bennett, D. A., Barker-Collo, S. L., & Parag, V. (2009). Worldwide stroke incidence and early case fatality reported in 56 population-based studies: a systematic review. *The Lancet Neurology*, *8*(4), 355-369.
9. Krug, E. G. (2004). Injury surveillance is key to preventing injuries. *The Lancet*, *364*(9445), 1563-1566.
10. Lloyd-Jones, D., Adams, R., Carnethon, M., De Simone, G., Ferguson, T. B., Flegal, K., ... & Haase, N. (2008). Heart disease and stroke statistics—2009 update. A report from the American Heart Association Statistics Committee and Stroke Statistics Subcommittee. *Circulation*.
11. Prüss-Üstün, A., Rapiti, E., & Hutin, Y. (2005). Estimation of the global burden of disease attributable to contaminated sharps injuries among health-care workers. *American journal of industrial medicine*, *48*(6), 482-490.
12. Saha, A. K., & Shahnawaz, K. (2016). Association of hypertension and coronary heart disease with stroke: a hospital based case control study from Kishanganj, Bihar. *JOURNAL OF EVOLUTION OF MEDICAL AND DENTAL SCIENCES-JEMDS*, *5*(46), 2965-2969.
13. Taylor, F. C., & Suresh Kumar, K. (2012). Stroke in India fact sheet (updated 2012). *Hyderabad: South Asia Network for Chronic Disease*.

14. Williams, L. S., Weinberger, M., Harris, L. E., Clark, D. O., & Biller, J. (1999). Development of a stroke-specific quality of life scale. *Stroke*, 30(7), 1362-1369.
15. World Health Organisation (2004) .Disease and injury regional estimates for 2004. Geneva, Switzerland.
16. World Health Organization, Public Health Agency of Canada, & Canada. Public Health Agency of Canada. (2005). *Preventing chronic diseases: a vital investment*. World Health Organization.

Webliography

1. The Stroke Association Uk 2008.www.stroke.org.uk,
2. <http://www.medicalnewstoday.com/articles/7624.php>
3. <http://stroke.ahajournals.org/>
4. <http://www.kent.ac.uk/>
5. <http://strokefoundation.com.au/>
6. <https://openarchive.ki.se>
7. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2861793/>
8. http://www.academia.edu/4298208/Quality_of_Life_after_Stroke_The_Importance_of_a_Good_Recovery
9. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2861793/>
10. http://www.academia.edu/4298208/Quality_of_Life_after_Stroke_The_Importance_of_a_Good_Recovery
11. http://www.who.int/cardiovascular_diseases/resources/atlas/en/index.html.
12. http://www.who.int/healthinfo/global_burden_disease/estimates_regional/en/index.html.
13. <http://stroke.ahajournals.org/>
14. <http://www.kent.ac.uk/>
15. <http://strokefoundation.com.au/>
16. <https://openarchive.ki.se>
17. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2861793/>
18. http://www.academia.edu/4298208/Quality_of_Life_after_Stroke_The_Importance_of_a_Good_Recovery
19. http://www.kent.ac.uk/chss/docs/Life_After_Stroke_Reconstructing_Everyday_Life.pdf
20. <http://www2.uwstout.edu/content/lib/thesis/2001/2001pritzlaffa.pdf>
21. https://www.etrainceu.com/course-module/2605889-137_stroke-care-module-24