

Effectiveness of Planned Nursing Care Among Patients With Cerebro Vascular Accident (CVA)

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ABSTRACT

This study was conducted with the objective of assessing the effectiveness of planned nursing interventions for the patients with cerebro vascular accident from 06-06-2016 to 17-06-2016. All the six patients had inability to move upper and lower extremities, muscle weakness, pain, aphasia, unable to carry out normal activity. Demographic data analysis revealed that the highest percentage (33%) of patients with cerebro vascular accident were in the age group of 41-50 and 61 above and most (83%) of them were males. Highest percentage (66%) of patients was moderate workers. About 66% were having no bad habits and 67% of them nonvegetarian. After repeated assessment and nursing interventions, the evaluation aspects were critically analyzed. It was found that recovery process was good. Patients' vital signs were stable. Neurological assessment revealed normal findings. At the time of discharge the Patients' major symptoms got relieved and their relatives were satisfied with the care provided.

Keywords: cerebro vascular accident, planned nursing care

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BACKGROUND OF THE STUDY

Healthy life is the gift of God. Developing countries like India are facing a double of communicable and burden communicable diseases [1-4]. Stroke is one of the leading causes of death and disability in India. CVA occurs when blood flow to a part of the brain is suddenly stopped and oxygen cannot get to that part [5–7]. This lack of oxygen may damage or kill the brain cells. According to WHO, 2013 around 15 million peoples suffer from stroke worldwide. Each year 5millions die and another 5 millions are permanently disabled. High blood pressure contributes to more than 12.5 millions stroke worldwide [8-10]. In 2013 the stroke was the second leading global cause of death, which is behind heart disease that is accounting for 11.8% of total death worldwide. The incidence rate in India is

119 to 145 among 100,000 population. Based on the recent studies on population, there is also a wide variation in case fatality rate with the highest being 42% in Kolkata [11-14].Stroke units predominantly available in urban areas that too in private hospitals. The management of cerebro vascular accident focuses on control of blood pressure and intra cranial pressure [15]. The nursing interventions of the patients with cerebro vascular accident is positioning to prevent the contractures, use measures to relive pressure, administer oxygen, apply splint at night to prevent flexion of affected extremities [16]. Being accountable for providing care to the patients by quality patients' care, the investigator interested to do a case study about effectiveness of planned nursing interventions for the patients with cerebro vascular accident [17, 18].



Objectives

To administer planned nursing interventions for patients with cerebro vascular accident.

To evaluate the effectiveness of the patients after administering planned nursing interventions of the patients with cerebro vascular accident.

METHODS

Research Design – Case study research design.

Research Approach – Evaluative approach.

Setting – Vinayaka Missions Kirupananda Variyar Medical College hospital, Salem. This place is approximately 100 m from Vinayaka Missions Annapoorana College of Nursing and it is a 720-bedded hospital [19–21].

Population – Patients with cerebro vascular accident hospitalized in VMKVMC hospital, Salem.

Sample – Patients with cerebro vascular accident admitted in medical wards & intensive care units of VMKVMC hospital, Salem [22, 23].

Sample size – A total of 6 patients with cerebro vascular accident admitted in medical wards and intensive care units in VMKVMC hospital, Salem [24].

Sampling technique – Nonprobability purposive sampling technique [24].

Method of Data Collection

- Semistructured interview schedule for demographic and clinical variables.
- Numerical pain scale and motor scale.
- Planned nursing intervention module.

RESULTS

The highest percentage (33%) of patients with cerebro vascular accident was in the age group of 41-50 and 61 age above and 83% of patients were males. Around 56% of patients with cerebro vascular accident were Hindu and 50% of them were high school level. Highest percentage 66% of patients with cerebro vascular accident was married and 66% of them were private employees. Highest percentage 66% of patients with cerebro vascular accident were moderate workers and 33% of them had the habit of smoking and alcoholism. Majority of patients with cerebro vascular accident were nonvegetarian. After providing planned nursing interventions all the patients' vitals were improved within 2nd and 3rd day. Patient's motor function and muscle co-ordination were improved and get adequate strength. All the patients' sensory function was improved and they can able to differentiate different senses. Majority of patient's mobility were improved and weakness is relieved by providing planned range of motion exercise. Around 0% of patients sleeping pattern were improved. All the patients' dietary pattern managed by providing low fat diet. Majority of patients were treated with antibiotics, anti-infective, diuretics. The major problem reported in the patients was muscle weakness, inability to lift upper & lower limb, aphasia, fatigue. The above symptoms were mostly resolved in the patients.

DISCUSSION & CONCLUSION

Based on the findings it can be concluded that all 100% of them had poor health condition, muscle weakness, inability to move upper lower limb and belongs to the age group of 41–50 and 61 years above. It was supported by Adams. A (2015) who conducted a study on the epidemiology of cerebro vascular accident in USA, shows that highest percentage [55%] of patients were in the age group of 61 year and above. In evaluation of planned nursing interventions, the patients were maintained

health improvement in status, improvement in motor activities & range of motion, improvement in coping abilities of patient and family members. duration of the hospital stay minimized and the treatment was cost effective. There is statistically (p<0.05) significant improvement in health status of patients with cerebro vascular accident. Thus, the planned nursing interventions were found to be effective for patients with cerebro vascular accident.

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REFERENCES

[1] H.P. Adam, Jr, B.H. Bendixen. Classification of subtype of acute ischemic stroke: definitions for use in a multi centric clinical treatment, *Stroke*. 2012; 35–41p.

- [2] C. Agyemang, G. Attah-Adjepong, E. Owusu-Dabo, A. De-Graft Aikins, J. Addo, A. Edusei, B. Nkum, G. Ogedegbe. Stroke in Ashanti Region of Ghana, *Ghana Med J.* 2012; 46(2): 12–7p.
- [3] A. Awarda, S. al Rajeh. Stroke data bank analysis of the 1000 cases, Acta Neurol Scand. 2011; 265–9p.
- [4] J. Bamfard, P. Sandeck, M. Dennis. Prospective study of acute cerebro vascular accident in an Oxford shine community, *J Neurol Neurosurg Psychiatry*. 2010; 1373–80p.
- [5] R.L. Brey. Antiphospholipid antibodies in young adults with stroke, *J Thromb Thrombolysis*. 2009; 105–12p.
- V.L. Feigin, G.J. [6] Rinkle. C.M. Lawes. Risk factors for hemorrhage subarachanoid an updated systematic review of epidemiological studies, Stroke. 2014; 56-62p.
- [7] F.J. Wang, H. Liu. *Incidence of Stroke on kimencommunity*. Taiwan, 2013, 258–64p.
- [8] B. Fuentes, J. Gallego. Guidelines for the preventive treatment of ischemic stroke and TIA. Recommendations according to etiological subtype, *Neurologia*. 2014, 168–83p.
- [9] M.G. George, X. Tong. Trends in stroke hospitalization and associated risk factor among children and young adult, *Ann Neurol*. 2011; 713–21p.
- [10] Global burden of disease study 2013, Collaborators (22 August 2015). Global, regional, and National incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 2013: a systemic analysis for the Global burden of disease study in London, 2013.
- [11] E. Groppo, R. De Gennaro. Incidence and prognosis of stroke in young adult:a population based study in Ferrara, Italy, 2012, 53–8p.



- [12] J.C. Gautics. Guid to clinical neurology, Melbourn publications, 543–5p.
- [13] J. Beth, M. Flyn. *Introduction to Critical Care Skills*. A Harcourt Health Science Company publishers, 389–400p.
- [14] J.C. Scherer. *Introductory Medical Surgical Nursing*. 4th Edn, 231–45p.
- [15] J. Murray, J. Young, A. Forster. Developing a primary care-based stroke model:the prevalence of longer-term problems experienced by patients and carers, *Br J Gen Pract*. 2013; 53: 803–7p.
- [16] T.B. Wyller, J. Holmen, P. Laake, *et al.* Correlates of subjective well-being in stroke patients, *Stroke*. 1998; 29: 363–7p.
- [17] J.K. Singlieton. *Primary Care*. Heun Ewan publications, 643–4p.
- [18] S.T. Kato. *Emergency Care*. 8th Edn., Edward T. Dickinson; 2012, 378–9p.

- [19] RA. Hargrevehuttel. *Medical Surgical Nursing*. 3rd Edn., 352–4p.
- [20] S. Sawyer, M.C. Cluskey. Beck Medical Surgical Nursing. 2nd Edn., C.V Mosby Company, 753–7p.
- [21] S.P. Gupta. *Medical Emergencies in General Practice*. 7th Edn., wRgoyal; 215–6p.
- [22] D. Summers, A. Leonard, et al. Comprehensive overview of nursing and interdisciplinary care of to the acute ischemic stroke patient, *Stroke*. 2010.
- [23] F.B. Van de Weg, D.J. Kuik, G.J. Lankhorst. Post-stroke depression and functional outcome: a cohort study investigating the influence of depression on functional recovery from stroke, *Clin Rehabil* 1999; 13: 268–72p. [PubMed].
- [24] R.N. Vera. *Vascular Nursing*. 3rd Edn., W.B. Saunders Company; 2012, 275–6p.