

## Post Ischemic Stroke Complication: How Much Nursing Diagnosis are Confirms by Neurologist?

Shayan Alijanpour

Mobility Impairment Research Center, Babol University of Medical Sciences, Babol, Iran, E-mail: alijanpour.sh@live.com

### Abstract

Diabetes mellitus is a debilitating, costly chronic condition, with prevalence rates expected to increase through the year 2050. In the United States (US), an aging population and anticipated changes in the ethnic composition prompts an alert to proactively address preventive measures focused on early detection, lifestyle and behavior modifications. The World Health Organization predicts by the end of 2020, stroke is the second cause of death after ischemic heart disease in developing and developed countries that lead to large health burden in low and middle income countries and accounting for more than 85% of mortalities worldwide. Ischemic strokes are the most common type of stroke, accounting for 85% of all strokes. The 30-day adjusted mortality rate for ischemic stroke ranges from 5% to 20%. In relation to the incidence of stroke in Iran, a report from Babol northern of Iran, the incidence of stroke was 50 per hundred thousand populations. In recent years, despite to all prophylactic measures to reduce the incidence of stroke by decreasing per time, advances in diagnosis, medical care and treatment of patients, but the number of patients has been increased Post stroke complication include pressure ulcer, dysphasia, pain, respiratory infections, urinary tract infection, fever, depression deep vein thrombosis, pulmonary embolism, myocardial infarction and cardiac arrhythmias, Congestive heart failure, urinary retention and peptic ulcers. These complications have adverse effects on the physical and mental status of these patients and involve their on other hand have an economic burden to society. Complications of stroke in the early days of hospitalized patients significantly increasing mortality rate. Frequent assessment of neurological status, blood pressure, blood sugar and temperature control and identify early stroke complication is the key to success in the care of these patients

### Material and method:

It was a retrospective cross-sectional study that all patients admitted with a diagnosis of ischemic stroke in the Ayatollah Rouhani Hospital of Babol from 2015 to 2016. Data was analyzed by chi-square, t-test and coefficient, Kappa tests in spss21. The study had been approved by the Research Council and Ethics Committee of Deputy of Research and Technology of Babol University of Medical Sciences. Informed consent was obtained from patients or their relatives.

**Complications:** Complications of ischemic stroke which was recorded in the hospital sheet had been selected that include of pressure ulcer, pain, fever, dysphasia, respiratory infections (aspiration pneumonia), urinary tract infection, depression, Intravascular coagulation, pulmonary embolism, myocardial infarction, cardiac arrhythmia, congestive heart failure, urinary retention and gastrointestinal problems (ulcers, hemorrhage)

**Data collection:** nurse and record in the hospital sheet before the neurologist diagnose according to the time was entered in checklist as early diagnose by nurse. In this study stroke nurses had Bachelor (BSc) with 5 years' experience in stroke care patients that worked in this ward. Ischemic stroke complications which was confirmed by neurologist or order the treatment

**Statistical analyze:** All data was recorded in statistical software (spss21). Chi-square, was used in order to determine the frequency of early complications with variable, also coefficient of agreement (kappa) was used for agreement between the nursing diagnosis that confirms by neurologist or not. P-value

**Results:** Of 300 ischemic stroke patients were studied, Distribution of sex was 154 (51.2%) female vs. 146 (48.5%) male, age range was 43-90 years with mean age of  $65.8 \pm 15.7$  years. Pain in 107 patients (35.5%), depression in 101 patients (33.6) and fever in 94 patients (31.2) were the most common early complications of ischemic strokes. Coefficient was excellent agreement between the neurologist and nurses (yes 703 (84%), no 136(16%), Kappa=0.76). The highest amount of agreement was in relation to the diagnosis of pressure ulcer (accurate 70 (93%), misdiagnose 5 (7%), Kappa=0.83) and dysphasia (accurate 79 (91%), misdiagnose 8 (9%), Kappa = 0.84). Although the lowest rate of agreement was in relation to the diagnosis of CHF (accurate 4 (17%), misdiagnose 20(83%), Kappa=0.10).

**Discussion:** Discussion This study was conducted on 300 ischemic stroke patients to assessment how much nurse's diagnosis was confirmed by neurologist and finding that strong and weak point of nurses diagnose. The most common early complication of ischemic stroke in this study was pain, which was in more than 35.5% of patients. In Harrison study, mentioned that post-stroke pain is a common but a forgotten complication, which has a prevalence of % 6-49. In Nesbitt study concluded that it is important that nurses can differentiate between different types of post- ischemic stroke pain, because they have

different cause and different type of management

Conclusion: Most common early complication of ischemic stroke was pain that need to be highlighted. post ischemic stroke complications in early post hospitalization period made by nurses and confirmed by neurologist was dysphagia and pressure ulcer. If nurses be familiar with early detection of post ischemic stroke complications, can play an important role, so more education of nurses in these issues to decrease misdiagnosis is recommended. Accurate nursing records as a base for early recognition are suggested to the highlighted nursing role in multidisciplinary team and communication with neurologist with early detection. It suggests a suitable feedback from neurologist to nurses. It can help nurses to analyzed how much it recognition was correct or need be more training. Acknowledgements: We appreciate the Deputy for Research and Technology of Babol University of Medical Sciences for approval and financial support of this study.