



IJPPR

INTERNATIONAL JOURNAL OF PHARMACY & PHARMACEUTICAL RESEARCH
An official Publication of Human Journals

ISSN 2349-7203




Human Journals

Short Communication

November 2020 Vol.:19, Issue:4


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Pharmacist as Care Providers for Stroke Patients



IJPPR
INTERNATIONAL JOURNAL OF PHARMACY & PHARMACEUTICAL RESEARCH
An official Publication of Human Journals

ISSN 2349-7203



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Submission: 23 October 2020
Accepted: 29 October 2020
Published: 30 November 2020

Keywords: Stroke, Pharmacist for stroke care, Hypertension

ABSTRACT

Stroke is a disease that affects the arteries resulting in and within the brain. A stroke occurs when a vessel that carries oxygen and nutrients to the brain is either blocked by a clot or bursts (or ruptures). When that happens, a part of the brain cannot get the blood (and oxygen) it needs, so it and brain cells die. A stroke is often caused either by a clot obstructing the flow of blood to the brain (called an ischemic stroke) or by a blood vessel rupturing and preventing blood flow to the brain (called a hemorrhagic stroke). A TIA (transient ischemic attack), or "mini-stroke", is caused by a temporary clot.



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INTRODUCTION

Hypertension, diabetes mellitus, and hyperlipidemia are predominant and well-established modifiable risk factors (MRF) for stroke. Appropriate measures for control of these MRF are essential for the improvement in the management of these risk factors. The pharmacist can provide valuable interventions to increase awareness on how to control these risk factors and improve cardiovascular outcomes. ^(1, 2,3) The patient may receive control of modifiable risk factors such as blood pressure, cholesterol, hemoglobin A1C, and blood glucose and reduced hospitalizations and mortality. ⁽⁴⁾

Pharmacists have become an indispensable part of the multidisciplinary team in providing care to a patient in health care settings. The pharmacist can provide interventions in stroke patients supported by a high level of evidence. This can help in the reduction of adverse events and medication errors. Proper assessment of the patient's eligibility and appropriateness of thrombolytic orders decreases the time to administration and improves order accuracy. ⁽⁴⁾

They improve adherence by providing approaches to help patients remember to take their medication on time with the use of alarms or pillboxes. Based on patient condition all information specific to individuals comorbid condition and drug-specific education on all current medications is provided. The pharmacist provides documentation of patient details in SOAP note i.e.; a brief description of subjective, objective, assessment and plan to be provided to the patient. ⁽⁵⁾

Oropharyngeal dysphagia is common in patients with stroke, pharmacist should ensure that patient receive appropriate medicine formulation; monitor all newly prescribed medication for effectiveness and adverse effects. Many patients may experience complications after stroke such as hemiplegic pain, agitation, deep vein thrombosis, depression, and thus detailed advice should be provided by the pharmacist. Each patient was provided with both verbal and written medicine information in form of patient information leaflets and medication reminder charts. ⁽⁶⁾

A pharmacist has and unique knowledge of pharmacology, pharmacokinetics, and interactions that help them assist in providing safe and effective treatment. Trained in the basic pathophysiology of blood clotting and the essentials of clinical clotting disorders,

pharmacists bring their expertise in clinical pharmacology and knowledge of drug interactions to the arena of patient management. ⁽⁷⁾

Involving a clinical pharmacist into the Stroke team helps decrease morbidity and mortality by preventing recurrent stroke by providing modification of risk factors and educating patients. The participation of pharmacists in inpatient care may improve quality of life and medication adherence while decreasing prescribing errors, morbidity, and mortality. The pharmacist performed can assess after the nurse has evaluated the patient, but before the physician did so. The pharmacist can use the same examination room as the nurse and have about 15 min for the initial assessment. Using the pharmaceutical care process, the pharmacist complete a medication history with the patient and discussed the patient's medication experience. The focus of the pharmacist's activities was on risk-factor modification, such as lipid and blood pressure control, diabetes management, smoking cessation, and optimization of antiplatelet and antithrombotic medications. Any drug-related issues identified and any relevant laboratory parameters were discussed with the patient. Suggestions for changes in drug therapy or monitoring (or both) were then provided to the neurologist and nurse verbally or in writing (in the patient's medical record). After the physician's assessment was complete, the pharmacist discussed with the patient any changes that had been made to the treatment plan and provided education about new medications. The patient was referred to the social worker or dietitian as needed. ⁽⁸⁾ Pharmacists can play a role in reducing risk factors for secondary stroke/TIA and prevent future hospital admissions. ⁽⁹⁾

Clinical Pharmacy Specialist (CPS) is the medication use and safety expert improving medication safety in stroke patients.

- ✓ CPS has the advanced skills necessary to provide comprehensive medication management in Primary Care and Specialty Care improving outcomes.
- ✓ Minimize the patient's need to see multiple providers, for medication assessments and evaluations thus improving access.
- ✓ Allows Provider time to be utilized for evaluation of disease progression and new identification of illnesses which improves overall health. ⁽¹⁰⁾

-Findings indicate that an intensified PC of patients after ischemic stroke by dedicated pharmacists may have a positive impact on HQL and patients' satisfaction. ⁽¹¹⁾

Pharmacists should be familiar with the eligibility requirements for tPA therapy, and they should be prepared to discuss and manage hypertensive crisis and thrombolytic therapy. Pharmacists' rapid access to thrombolytic therapy and their knowledge of appropriate dosage and administration are keys to successful therapy, and their participation remains crucial to effective stroke management. ⁽¹²⁾

CONCLUSION:

The review concluded that pharmacists need to take a methodical approach to efficiently assess the patient by attaining valuable information from patient records and interviewing family members, and they should be prepared for a multitude of clinical scenarios. Equally important, pharmacists must have a thorough understanding of the patient's history of present illness, vital statistics, medical history, and medication history. Thus, Pharmacist provides a positive impact on the increased use of evidence-based therapies, medication adherence, risk factor target achievement, and maintenance of Health-related quality of life.

REFERENCES:

1. <https://www.stroke.org/en/about-stroke>
2. Chiu CC, Wu SS, Lee PY, Huang YC, Tan TY, Chang KC. Control of modifiable risk factors in ischemic stroke outpatients by pharmacist intervention: an equal allocation stratified randomized study. *Journal of clinical pharmacy and therapeutics*. 2008 Oct;33(5):529-35.
3. Bottorff M. Role of the pharmacist. *Pharmacotherapy: The Journal of Human Pharmacology and Drug Therapy*. 2006 Dec;26(12P2):227S-32S.
4. Basaraba JE, Picard M, George-Phillips K, Mysak T. Pharmacists as care providers for stroke patients: a systematic review. *Canadian Journal of Neurological Sciences*. 2018 Jan;45(1):49-55.
5. Andres J, Ruchalski C, Katz P, Linares G. Drug therapy management in a pharmacist-run stroke prevention clinic. *American Journal of Health-System Pharmacy*. 2016 Sep 15;73(18):1388-90.
6. <https://hospitalpharmacyeurope.com/news/editors-pick/the-pharmacists-role-in-a-stroke-unit/>
7. Lakshmi R, James E, Kirthivasan R. Study on impact of clinical pharmacist's interventions in the optimal use of oral anticoagulants in stroke patients. *Indian journal of pharmaceutical sciences*. 2013 Jan;75(1):53.
8. Lindblad AJ, Howorko J. Integration of a pharmacist into a stroke prevention clinic team. *The Canadian Journal of Hospital Pharmacy*. 2008;61(6).
9. Andres J, Stanton-Ameisen O, Walton S, Ruchalski C. Pharmacists' Impact on Secondary Stroke Prevention. *Journal of pharmacy practice*. 2019 Oct;32(5):503-8.
10. <https://www.ocf.berkeley.edu/~rci/blog/wp-content/uploads/2013/11/Morreale-Pharmacists-Role-in-Stroke-Prevention-Management-in-an-Integrated-Medical-Home-Setting.pdf>
11. Hohmann C, Klotz JM, Radziwill R, Jacobs AH, Kissel T. Pharmaceutical care for patients with ischemic stroke: improving the patients quality of life. *Pharmacy world & science*. 2009 Oct 1;31(5):550-8.
12. Edward H. Lee, PharmD. *American Society of Health-System Pharmacists*. 2011 Mar 36(3): 159–16