Tissue Plasminogen Activator Non-Treatment in First-Time Ischemic Stroke

Will Brewer, MSN, RN, CEN

University of Alabama at Birmingham School of Nursing

Introduction/Background

Strokes are a significant problem in America impacting around 800,000 individuals annually. Strokes and stroke complications are the fourth leading cause of death to the American population. Strokes can present two different ways: ischemic (clot) or hemorrhagic (bleed). Overwhelmingly, ischemic strokes account for 87% of all cerebrovascular events. However, tissue plasminogen activator (tPA) is used sparingly to treat them. tPA is a "clot busting" agent that is used to achieve thrombolysis in ischemic neurological events. Since its inception, tPA has been used with controversy and hesitancy.

While tPA has been deemed safe and effective, clinicians prescribe it conservatively. In 2010, The American Heart Association heavily encouraged IPAs use within its advanced cardiovascular life support curriculum; unfortunately, it is still used sparingly. Whether at a small community hospital or a leading stroke credentialed medical center, tPA is still underutilized. Gaining insight as to why physicians are not prescribing tPA is essential to help decrease the devastating effects of stroke. tPA remains the most effective and timely treatment for ischemic stroke management. Not only are the effects of stroke. tPA remains the most effective and timely treatment for ischemic stroke management. Not only are they not utilizing tPA as a treatment modality for first-time ischemic stroke. The medical specialty doctor or primary work area is the emergency room; however, they do not have to be credentialed in emergency medicine. Mid-level providers (MLP) cannot prescribe tPA in Alabama. Thus, MLP’s will be excluded from this study.

Methodology/Purpose

Descriptive phenomenology will be employed to examine why physicians are not utilizing tPA as a treatment modality for first-time ischemic stroke. The lived experiences of the physicians are extremely important in this proposed research study. The main focus of the interviews will be to gain precise accounts of attitudes, perceptions, and involvement with tPA administration. By employing the qualitative approach to gain data, the physician will be able to provide their experiences of successes and failures with tPA administration and/or lack of administration. The purpose of this proposed qualitative research study is to evaluate physicians’ attitudes toward tPA and how their attitudes negate its use in first-time ischemic stroke treatment.

Research Questions

What are physicians’ attitudes toward tPA use in first time ischemic stroke?

How do physicians describe their comfort level in prescribing tPA in a first-time stroke victim?

Does the unfamiliarity/non-use of tPA among physicians lead them to apply a non-credible exclusion criteria to the decision process?

Sample

The sample for this proposed research study will include emergency department physicians from various medical centers in Alabama. The physicians primary work environment must be the emergency room; however, they do not have to be credentialed in emergency medicine. Mid-level providers (MLP) cannot prescribe tPA in Alabama. Thus, MLP’s will be excluded from this study.

Theoretical Framework

Dr. Albert Bandura’s social cognitive theory introduced human beings as social learners. The model that explains this theory is titled triadic reciprocal causation and considers elements based on three domains: cognitive/personal, behavioral, and environmental. The social cognitive theory is grounded in the concepts of observational learning and modeling. According to Bandura, people learn by observing and watching others. Thus, it is expected that physicians have learned not to administer tPA from watching others.

References


