Doctor of Nursing Practice Projects   School of Nursing

Implementing the Timed Up and Go Test to Prevent Falls

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Executive Summary

Introduction of the Problem

The American Nurses Association (ANA) defines a fall as a "sudden, unintentional descent with or without injury to the patient, that results in the patient coming to rest on the floor or against some other surface" (Press Ganey Associates, Inc., 2020, p. 2). Patients who are a part of the geriatric population and who are 65 years and older, are commonly hospitalized related to injuries in the context of falling. Amongst this population, behavioral health patients have the highest rate of injurious falls (Ocker et al., 2020). For the geriatric mental health inpatient population at the hospital of project implementation, falls rates are below average but they continue to be a challenge for the staff and providers on the unit. The patients that are admitted to this unit have a variety of mental health diagnoses, and several factors can be contributing to why falls occur.

When there is a patient fall on the unit, this impacts multiple things such as staffing, cost, injury, quality of life for the patient, and possible extension of hospital stays (Ocker et al., 2020). Part of the unit's post-fall requirements is patient-centered care (PCC) for the patient who is involved in the fall. The purpose of the PCC is the prevention of future falls but with staffing challenges, falls that lead to a PCC interferes with the care of other patients that are on the unit if the staff is being utilized to monitor one patient for an entire shift. Costs related to falls increase if patients are sent out to outside hospitals for further examination. If a patient has a severe injury related to a fall, the patient's quality of life could change due to the patient not being as independent as they were before falling. With examination of fall assessments, patient factors, staff communication, and environmental factors, a study shows that the rate of fall-related injuries decreased from 5.43 to 0 per 1,000 patient days (Ocker et al., 2020).

When a patient is admitted to the mental health unit, the Morse Fall Scale (MFS) screening tool is used to assess and help predict the level of fall risk. The purpose of this project is to determine if the evidence-based Timed Up and Go Test is a more suitable tool to assist with identifying patients who are at a higher risk for falls in the inpatient geriatric psychiatry setting compared to the Morse Fall Scale. This project has the potential to provide the unit with a tool that can improve the identification of patients who are at a higher risk of falls. If the use of the Timed Up and Go Test helps with identifying higher risks patients, staff will be able to place appropriate interventions that will continue to further prevent falls and falls-related injuries. Through this, fall rates may decrease therefore decreasing costs and improving the quality of life for patients.

Literature Review

Elderly patients who are on medication for a variety of diagnoses can be at a higher risk for falls (Jindel et al., 2019). With the physiologic changes of aging, managing behavioral issues by prescribing antipsychotics to older adults are associated with adverse reactions that are more complex than in younger adults (Pathak & Duff, 2018). The geriatric population is more vulnerable to adverse reactions therefore, antipsychotics that have been prescribed to older adults should be frequently evaluated to determine if it is necessary to continue the medication (Pathak & Duff, 2018).

The setting where a patient spends most of their time doing everyday activities plays a significant role in their risk for falls. If the health of an elderly individual becomes impaired, and there are environmental risk factors that are in proximity, the occurrence of falls is more likely to happen (Alshammari et al., 2018). During the admission process, the identification of medications or environmental factors that have the possibility of increasing the risk of falls for

the patient should be assessed to help prevent and reduce any falls while being inpatient (Furness et al., 2017).

Fall risk assessments are a valuable and efficient method of identifying fall risks if they can properly identify all patients who are at high risk for falls (Borikova et al., 2018). Patients in a psychiatric unit are at a great fall risk because of a multiplicity of issues so screening and using fall risk assessment tools to help identify the patients who are at a higher risk is important (Wong & Pang, 2019). Most hospitals use generic tools to assess fall risk more specifically for patients in an acute or inpatient care setting where they do not ambulate as much as patients admitted to a mental health setting (Wynaden et al., 2016). Using a fall risk assessment tool not fit for the proper hospital setting may lead to the misidentification of patients at any level of risk for falls.

The most commonly recommended fall risk assessment tool used in a general hospital setting is the Morse Fall Scale (MFS) (Borikova et al., 2018). The Morse Fall Scale is a fall risk assessment tool that includes six risk factors: fall history, secondary diagnosis, ambulatory aid, intravenous therapy, gait, and mental status (Morse, 1986). Some of the risk factors within the MFS do not apply to the geriatric inpatient mental health population. This is the reasoning for exploring The Time Up and Go (TUG) test for this particular group of patients.

The TUG is a modified version of the Get up and Go (GUG) test, which was developed by Podsiadlo and Richardson to assess the mobility of patients (Coelho-Junior et al., 2018). The GUG test assesses and evaluates a patient only by observation, using a five-point scale where 1 indicates that there are no issues with the patient's gait or mobility, and 5 indicates that there is a severe impairment with the patient's gait or mobility and identifies the fall risk. The TUG test can be a useful clinical tool that uses time in addition to observation to evaluate older adults' balance, gait speed, and functional capacity (Coelho-Junior et al., 2018). The Centers for Disease

Control and Prevention recommends this screening tool to assess the geriatric population for fall risk (2017). According to Shumway-Cook et al, when using a statistically significant log regression model, TUG times can identify patients who are at high and low risk for falls, increasing in TUG times being associated with an increased likelihood of patient falls (2000).

Project Methods

This project took place in a geriatric inpatient unit. The MFS was already in place before implementing the TUG screening tool. The MFS has been in place for a lengthy period on this unit with no re-evaluation of the utilization.

Before implementing the TUG screening tool, this project was submitted to the IRB at Southern Illinois University Edwardsville and the St. Louis VA as a quality improvement project. Once approval was obtained from both parties, the nurses and the nurse manager were educated on how to implement the TUG screening tool, the purpose and goal of implementing the tool on the unit. The nurses were given a handout from the CDC provided on their STEADI link, of the TUG screening assessment tool to use during admission and post-fall. The nurses also participated in a demonstration of how to properly perform the assessment after watching a video on how to use this tool with a patient. A PowerPoint presentation was also included in meeting with the nurses to present and give the nurses a chance to share any questions or concerns that they had. The nurses were informed that after implementing the tool for a period of time, they would be provided with a survey that allowed them to give their feedback about their thoughts on the TUG assessment tool.

Evaluation

Twenty-one nurses who work in the geriatric unit completed the survey. The survey included feedback about the effectiveness of the TUG screening tool, its usability and satisfaction with the tool. suggests that 20 nurses (95.24%) think that the screening tool is

effective in identifying falls. There are 2 nurses (9.52%) that believe the TUG screening tool can be used independently when screening for falls. Twenty-one nurses (100%) reported that one of the benefits of the TUG screening was that it is directly aimed at the geriatric population. Sixteen nurses (80%) reported the benefit of having an extra tool to assess patients for falls upon arrival. Fifteen nurses (71.42%) reported that one of the biggest challenges is the length of time patients stay, so the tool is not used often related to longer hospitalizations. Twenty nurses (95.24%) reported that the TUG screening tool is easy to follow and comprehend, and 21 nurses (100%) reported that the screening tool is time efficient while doing an admission or assessing a patient post-fall.

Limitations

Limitations of this project included patients' length of hospital stay, which did not allow the nurses involved in this project to utilize the tool as much as one would hope to collect data. With the nurses working different shifts, there was a limitation in demonstrating the TUG test in person in addition to the videos and instructions sent to each nurse. There was also a limited number of nurses who were enthused by the project and remembered to use the screening tools every time during the admissions process and post-fall. This project could improve if more nurses increased their involvement and stay consistent with completing the TUG screening tool during every admission and post-fall on the unit.

Impact on Practice

When implementing the TUG screening tool on the unit, there was a slight increase in identifying fall risks among newly admitted patients. Within a 6-month period, there had been one fall on the unit that happened prior to implementing the screening tool in October 2022. With the current body of research available, it is predicted that using the TUG screening tool and

identifying fall risk in the geriatric mental health unit can improve if the screening tool is used consistently and correctly. Being able to properly identify the risk amongst this population can assist with continuing to decrease falls on the unit.

Suggestions for the continuation of this tool would be to train some nurses and designate a nurse on each shift who would assist with demonstrating the TUG screening tool in person. This can ensure that all nurses are receiving the proper training and that any questions or concerns that a nurse may have can be immediately addressed. Another recommendation would be finding a way for the nurses to be more involved in using this tool as an assessment tool during admissions and post-fall. With the length of stay being challenging at times on this unit, to collect the proper data on if this tool is effective, there would be a need for the nurses to perform the assessment tool every time it is supposed to be used.

Conclusions

Implementing the Timed Up and Go screening tool assessment has been shown to improve fall rates and identify fall risks throughout the literature review. If implemented consistently on 51 West, there could be a potential continuation of the decrease in the number of falls on the units. Although nurses feel that implementing the screening tool is time efficient, they also feel as if it can be a waste of time because you can assess a patient's gait from the moment, he/she gets off the stretcher when arriving. Not every nurse will be able to assess the patient's gait upon arrival so having documentation like the TUG screening tool in addition to the MFS can provide information to each nurse who interacts with the patient. Especially if there are changes that occur with the patient's gait during their hospitalization. If the nurses continue to use this tool, there could be data that shows improvement in patients' falls.