Privacy or Safety: What is BEST practice to keep patient's from falling?

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ABSTRACT

According to Morse (1997, p.2), "falls are the second leading cause of death in the United States; 75% occur in the elderly population." Hendrich (2006) states that more than half of all falls occur when patients try to get to the toilet while exiting the bed, and a regular toileting schedule for patients identified as high risk due to impaired mobility or drug side effects will reduce falls in most acute care hospitals. This evaluation was conducted for the purpose of determining if the intervention, a "no toileting alone" protocol, reduced falls with patients identified as high risk (greater than 51on the Morse Fall Scale (MFS)) for the study units following the implementation of the "no toileting alone" protocol. The questions that guided the evaluation were:
1. Does use of a "not toileting alone" protocol decrease the total number of falls and fall rates of patients identified as high risk on the MFS?
2. Is the severity and injury of a fall pre-protocol greater than post-protocol?

PURPOSE

The purpose/goal of this presentation is to show that a "no toileting alone" protocol works to reduce patient falls in those patient's who are at high risk for falling. In order to accomplish this a true collaborative approach was implemented between the DNP and multiple other processions within the hospital. A partnership was formed with patient' s, families and bedside caregivers to understand the importance and reasons why assisting with toileting and being within arms reach of the patient was necessary while using the bathroom. Bedside caregivers included physicians, nurses and nursing assistants. This collaborative program is transforming our fall program and improving the safety of our patients.

OBJECTIVES

By the end of this presentation the participant will be able to:
❖ Define the significant factors related to falls in high risk patients.

❖ Identify how a "no toileting alone" protocol decreases falls and falls with injury

❖ List the components of the "no toileting alone" protocol

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METHODS

A retrospective analysis will be conducted, using a cross-sectional review design. The research was conducted in a 437 bed not-for- profit Midwest healthcare setting. The two protocol units where the "no toileting alone" protocol was introduced included a 26 bed medical unit and a 34 bed surgical unit. Data will be analyzed using archived fall incident reports for patients identified as high fall risk (> 51 MFS) from Feb 2012 thru Jan 2013 for the pre-protocol data and Feb 2013 thru Jan 2014 for the post protocol data of de-identified patients who fell. The rate of falls per 1000 patient days was calculated at the unit level for both pre-protocol (n=9) and post-protocol units (n=2) for the evaluation period starting Feb 2012 through Feb 2014. The "no toileting alone" protocol was introduced in Feb 2013. The inpatient sample size included 78 inpatients that fell from Feb 2012 to Feb 2014. Descriptive statistics collected included age, gender, Morse Fall Score, Total Length of stay (LOS) and LOS post fall.

The "no toileting alone" protocol consisted of completing a fall partnership agreement with the patient and family, referencing signs placed above the patient's bed on the ceiling reminding them to call for assistance before getting our of bed, utilizing bed alarms and chair alarms to alert staff when patients were attempting to get out of bed alone and put high fall risk patients on an every 2 hour toileting schedule. The most important part of the protocol was that staff were to remain within an arms length of the patient or have the patient in visual sight, Staff were extensively educated on all of these interventions related to the "no toileting alone" protocol.
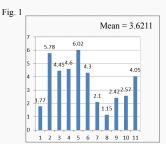
RESULTS

The analyses of the data were divided into pre and post protocol groups

1. Does a "no toileting alone" protocol decrease the total number of falls and fall rates of patients identified as high risk on the MFS?"

Data from eleven units were used to calculate the pre protocol fall rates. A pre protocol fall rate (n = 11) showed a mean value of 3.6211 (Figure 1).

Parametric (T-tests) and non-parametric (Wilcoxon rank sum) statistical tests were conducted on the sample units (n = 2) where the "no toileting alone" protocol was applied. In addition, analysis of pre and post fall rates of the two units was carried out. The post protocol rate (n = 2) showed a mean of 1.970 (Figure 2). There was a lack of variability due to the small sample. The Wilcoxon rank sum test demonstrated a one tailed (indicating an expectation the post protocol rates will fall) (p = 0.0783). Although greater than the significance .05 level it was close. Results of this inquiry demonstrate that although not statistically significant at the .05 level the total numbers of falls and fall rates did decrease.
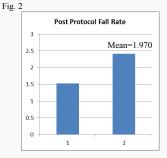
Fig. 1

Mean = 3.6211

(bar chart: 1.77, 5.78, 4.45, 4.6, 6.02, 4.3, 2.1, 1.15, 2.42, 2.57, 4.05 for units 1–11)

Fig. 2

Post Protocol Fall Rate

Mean=1.970

(bar chart: values at 1 and 2)

Table 1 Descriptive Statistics

Individual Descriptive Statistics				
	Sub Group	N	Mean	Std Deviation
Continuous				
	Age	78	62.128	14.960
	MFS	78	67.564	14.801
	Actual LOS/days	78	7.051	2.606
	LOS Post Fall/days	78	2.910	1.398
	Cost	78	4085.474	2122.632
Discrete - binary				
	Group Pre Protocol	26		
	Post Protocol	52		
	Gender M	49		
	F	29		
	Injured Yes	64		
	No	14		
	Severity Yes	64		
	No	14		

Comparisons					
	Sub Group	N	Mean	Std Deviat	p Value
Gender by Falls	Female	49	69.1837	16.213	0.1033
	Male	29	64.8276	12.1363	
Cost by Group	Post Protocol	26	3766.6	1880	0.3268
	Pre Protocol	52	4244.9	2254	
Severity by Group	Post Protocol	26			0.3633
	Pre Protocol	52			
Injury by Group	Post Protocol	26			0.3633
	Pre Protocol	52			
Actual LOS by Group	Post Protocol	26	6.5769	2.2658	0.2728
	Pre Protocol	52	7.2885	2.7748	
Change in Fall Rates by Units	Other Units	9	6.778	4.243	0.0783
Wilcoxon 1 tail test	Protocol Units	2	1.9	4.243	

CLINICAL IMPLICATIONS

The impact of a "no toileting alone "protocol did not demonstrate statistical significance but did demonstrate clinical significance to this inquiry. The clinical significance of a decrease in the number of falls and the overall fall rates for the post-protocol units was significant in terms of program outcomes. This pilot gives further reason to study the impacts of a "no toileting alone" protocol with a larger sample population. These results support the findings that toileting was one major factor related to inpatient falls and that a "no toileting alone" protocol may be critical to fall prevention (Hendrich, 2006; Sullivan & Bandros, 1999, and Alcee & Mather, 2000). The findings of this study underline the importance of assuring patient safety while toileting.

Nurses must acknowledge the importance to patient safety for remaining with high fall risk patients while toileting and recognize this is an important intervention for fall prevention. It is prudent to conduct further study to establish a relationship between toileting alone and the "no toileting alone" protocol. Strategies must be identified to allow for nurses to remain with patients assessed at high fall risk while accommodating the needs of the other patients they are responsible for. Until there is greater understanding for rationale preventing nurses from staying with patients while toileting the true benefits of a "no toileting alone" protocol will not be fully realized?

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