

## BACKGROUND

Bladder and bowel dysfunction are common problems in patients with underlying neurologic conditions, such as stroke and multiple sclerosis (MS) [1]. It is not well documented but noted in individuals with traumatic (TBI) and acquired brain injury (ABI) [2]. Assessing the nature and extent of bladder and/or bowel (B&B) symptoms at admission to an acute rehab facility or community-based care is integral to the success of rehabilitation of the neurologic patient population throughout the care continuum. The nursing assessment and ongoing documentation should accurately report the patients' perceptions of their dysfunction, resulting in an appropriate nursing plan of care to achieve successful bladder and bowel control [3].

## AIM & HYPOTHESIS

**AIM:** To determine if there were discrepancies between the patients' perception and/or reporting of B&B symptoms and the nursing documentation of B&B symptoms as recorded in the patients' medical record (MR) in the rehabilitation setting.

**HYPOTHESIS:** The B&B symptoms and perceptions will not be well described and/or will be absent from the documentation.

## DESIGN AND METHOD

This study used a descriptive design with structured B&B symptoms to measure differences between patient perceptions and self-report and nursing documentation of B&B in the medical record. The study included a convenience sample of males and females with specific neurological conditions including, stroke, MS, TBI, and ABI, and Parkinson's disease admitted to 3 acute inpatient rehabilitation facilities (IRF) in the Mid-Atlantic region of the USA. Assessment was performed within 10 days of admission.

## DATA COLLECTION TOOLS

The questions on the B&B symptoms tool were adapted from standardized and validated questionnaires used in clinical practice, in research of lower urinary tract symptoms and from the International Consultation on Incontinence Questionnaire Bowel (ICIQ-B). Cognition was assessed using the Mini-Cog<sup>®</sup> Short Version but no one was excluded based on score. The Functional Independence Measure (FIM<sup>®</sup>) tool, used to determine outcome measures on patients newly admitted to rehabilitation centers was collected on day of chart review.

## RESULTS

A total of 140 patient interviews/chart reviews were completed. Mean age was 64.6 (range 26-94). The gender and ethnicity is seen in **FIGURE 1**. **TABLE 1** notes diagnoses of which stroke was the most prevalent (n=115). FIM scores varied with burden of care scores in the moderate range (see **TABLE 2**). Based on Mini-cog results, 41% of the sample had cognitive issues (see **TABLE 3**). Surprisingly, for this neurologic population, only 14 patients had documentation in their medical record of having undergone urodynamic tests performed within the past year. Four statistically significant differences were found between the MR and self-report. Bladder history, Bladder management (p = .002) and Use of urinary incontinence products differed (p = .0001) Bowel-specific questions, Use of laxative for BM (p = .029) and Use of absorbent product for bowel leakage (p = .0001) (see **TABLE 4**).

## DEMOGRAPHICS

FIGURE 1

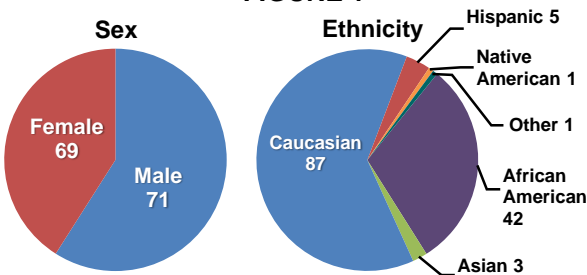


TABLE 1 - Diagnosis

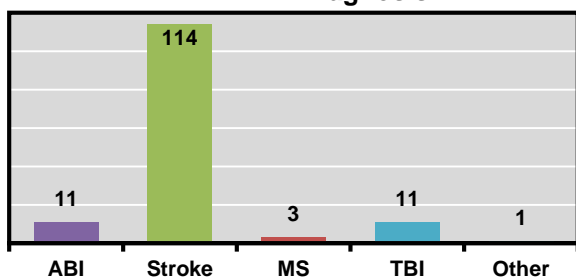


TABLE 2 - Patients' Scores on FIMS<sup>®</sup> (N=140)

Scores	Mean (SD)	Range	N
FIM Bladder	3.91 (2.07)	0-7	137
FIM Bowel	4.28 (1.84)	0-7	130
FIM Toileting	3.34 (1.65)	0-7	134

TABLE 3 - Mini-Cog<sup>®</sup> (N=138)

Negative	81(58)
Positive	57(41)

TABLE 4 - Results

	Absolute Agreement	Phi	P Value	n	Not in Record
<b>Bladder History</b>					
Bladder mgt	.854	.396	.002	138	9
Abnormal PVR	.531	-.04	.82	139	48
Urodynamic	.778	.265	.244	140	95
<b>Bladder Specific Questions</b>					
Daytime frequency >2 hours	.74	.295	.717	140	13
Nighttime frequency	.604	.156	.101	140	24
Feels bladder urge sensation	.128	.113	.370	140	70
Knows when wet	.50	-.089	1.00	140	120
Leaks w cough sneeze, laugh	.778	-.129	1.00	140	131
Leaks on way to bathroom	.70	.218	1.00	139	129
Uses incontinence products	.77	.50	.0001	140	39
Incomplete bladder emptying	.62	.099	.664	140	111
Difficulty urinating	.838	.319	.115	140	103
Strains to void	.910	.043	1.00	140	116
Pain/burning	.897	-.054	1.00	140	101
Toileting program	.508	.175	.492	140	79
<b>Bowel Specific Questions</b>					
Ostomy	.95	-.021	1.00	140	23
Move bowels every 3 days	.699	.007	1.00	138	5
Uses laxatives	.585	.208	.029	140	10
Incontinence	.739	.155	.091	140	6
Bowel urgency	.815	.271	.203	140	86
Use of absorbent products	.739	.500	.0001	139	39

## CONCLUSIONS

Striving to improve consistency between the patients' perception/reporting of B&B symptoms and the nursing documentation is necessary before an effective nursing care plan for patients with neurologic diseases. This study demonstrates the need for continued work to identify and validate comprehensive B&B assessment tools and documentation requirements within the field of rehabilitation nursing. It also shows that nurses need to consider the patient's cognition, comprehension and communication abilities when collecting B&B symptoms for nursing assessment.

## REFERENCES

- Newman, D.K., Wyman, J.F., & Welch, V.W. (Eds.). (2017). Neurogenic lower urinary tract dysfunction. In Core Curriculum for Urologic Nursing (pp. 503-518). Pitman, NJ: Society of Urologic Nurses and Associates, Inc.
- Wein, A.J., Kavoussi, L.R., Partin, A.W., & Peters, C.A. (2016). Pathophysiology and classification of lower urinary tract dysfunction: overview. In Campbell-Walsh Urology, 11th Edition (pp. 1685-1696). Philadelphia, PA: Elsevier.
- Hentschke, P. (2009). 24-hour rehabilitation nursing: the proof is in the documentation. Rehabilitation Nursing, 34(3), 128-132.