

## Outcome of Bowel Management Program in Patient with Spinal Cord Injury

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**Abstract :** Background: Neurogenic bowel is common condition after spinal cord injury. Most of spinal cord injured patients have motor weakness, mobility impairment which leads to constipation. Moreover, the neural pathway involving bowel function is interrupted. Therefore, the bowel management program should be implemented in nursing care in the earliest time after the onset of the disease to prevent the morbidity and mortality. Objective: To study the outcome of bowel management program of the patients with spinal cord injury who admitted for rehabilitation program. Study design: Descriptive study. Setting: Rehabilitation ward in Srinagarind Hospital. Populations: patients with subacute to chronic spinal cord injury who admitted at rehabilitation ward, Srinagarind hospital, aged over 18 years old. Instrument: The neurogenic bowel dysfunction score (NBDS) was used to determine the severity of neurogenic bowel. Procedure and statistical analysis: All participants were asked to complete the demographic data; age gender, duration of disease, diagnosis. The individual bowel function was assessed using NBDS at admission. The patients and caregivers were trained by nurses about the bowel management program which consisted of diet modification, abdominal massage, digital stimulation, stool evacuation including medication and physical activity. The outcome of the bowel management program was assessed by NBDS at discharge. The chi-square test was used to detect the difference in severity of neurogenic bowel at admission and discharge. Results: Sixteen spinal cord injured patients were enrolled in the study (age  $45 \pm 17$  years old, 69% were male). Most of them (50%) were tetraplegia. On the admission, 12.5%, 12.5%, 43.75% and 31.25% were categorized as very minor (NBDS 0-6), minor (NBDS 7-9), moderate (NBDS 10-13) and severe (NBDS 14+) respectively. The severity of neurogenic bowel was decreased significantly at discharge (56.25%, 18.755%, 18.75% and 6.25% for very minor, minor, moderate and severe group respectively;  $p < 0.001$ ) compared with NBDS at admission. Conclusions: Implementation of the effective bowel program decrease the severity of the neurogenic bowel in patient with spinal cord injury.

**Keywords :** neurogenic bowel, NBDS, spinal cord injury, bowel program

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