

DEVELOPMENT OF EMOTIONAL RESPONSE SCALE ASSOCIATED WITH URINARY EXPERIENCE OF STROKE PATIENTS IN THE RECOVERY PHASE

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INTRODUCTION

30-50% chronic stroke patients appear to have storage symptoms by brain injury. Urinary storage symptoms are susceptible to toilet failure and UI, related to ADL (Activities of Daily Living) recovery.

Patients, nurses and other disorders (such as paralysis) are less likely to notice the urinary symptoms tend to delay treatment and care.

Therefore, we quickly grasped that the stroke patient was in trouble with urination, and created a scale to be able to provide care, and examined the validity and reliability.

METHODS

In 2010, the data (basic attributes, OAB (OABSS), ADL (FIM), and preliminary scale) of 120 stroke patients over 40 years of age were analyzed by factor analysis, secondary factor analysis, and the scale was created. In addition, the correlation coefficient of the spearman, in Cronbach's α , We were verified validity and reliability.

[Ethical considerations]

The ethics committee of the Faculty of Medicine, Yamagata University, the administrator of the research facility, After approval, it was carried out.

RESULT

Table 1 General and LUTS, go to bathroom-related characteristics of participants n=120

Item	M \pm SD	Item	N(%)
Age	71.9 \pm 10.5	Aftermath be Crippled	101(91.7)
Period of morbidity	88.5 \pm 55.2	Forgetfulness	83(69.2)
SDD	1.5 \pm 1.1	Difficulty in talking	71(59.2)
FIM total score	94.8 \pm 23.6	numbness in the limbs	59(49.2)
motor	63.6 \pm 19.7	Swallow Difficulty	47(39.2)
cognitive	31.1 \pm 6.2	Vertigo· Tinnitus	34(28.3)
OABSS	4.9 \pm 3.6	Urinary incontinence	49(37.5)
Item	N(%)	Stool Incontinence	11(9.2)
Gender Male	66(55.0)		
Female	54(45.0)		
Clinical type			
Cerebral infarction	68(56.7)		
Hemorrhage	43(35.8)		
Subarachnoid hemorrhage	9(7.5)		

Table2 Factor loadings of Emotional Response related to going to the bathroom for Disability Stroke patient with OAB By factor analysis(n=120)

Item	Factor1	Factor2	Factor3
Factor1: Shame of needing help to go to bathroom (Cronbach'sα=0.90)			
Q9. I feel bad to be taken care of by the care staff every time I urinate.	0.85	0.24	0.22
Q18. I can't go home until I can go to the bathroom myself.	0.82	0.27	0.24
Q8. It's hard for me to say that I want to go to the bathroom.	0.82	0.17	0.04
Q11. I'm anxious whether the care staff will come in time for urination.	0.77	0.21	0.30
Q12. I get depressed because I can't go to the bathroom like I used to the stroke.	0.66	0.22	0.31
Factor2: Anxiety from LUTS (Cronbach'sα=0.82)			
Q2. I'm worried about the number of times I go to the bathroom.	0.23	0.81	0.12
Q1. I'm worried that I want to urinate suddenly.	0.24	0.72	0.20
Q3. It's hard for me to get up at night to go to the bathroom.	0.17	0.72	0.18
Q5. I'm restless because I feel there is feeling of incomplete emptying.	0.17	0.59	0.23
Factor3: Worried about UI (Cronbach'sα=0.76)			
Q6. I have incontinence and am disappointed.	0.21	0.26	0.84
Q7. I'm worried without a urine pad.	0.34	0.23	0.83
Q13. It takes time to get to the toilet and I get impatient.	0.19	0.18	0.68
Cumulative prortion(%)	48.7	59.3	68.1

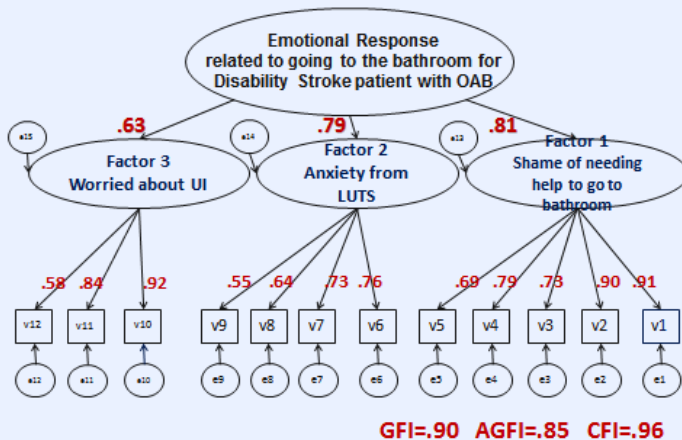


Figure1 Confirmatory factor analysis of Emotional Response Scale related to going to the bathroom for Disability Stroke patient with OAB

A factor analysis by the Balinese Max method with Kaiser Normalization

Table3 Emotional Response Scale related to going to the bathroom for Disability Stroke patient with OAB

- Q1. I feel bad to be taken care of by the care staff every time I urinate.
- Q2. I can't go home until I can go to the bathroom myself.
- Q3. It's hard for me to say that I want to go to the bathroom.
- Q4. I'm anxious whether the care staff will come in time for urination.
- Q5. I get depressed because I can't go to the bathroom like I used to the stroke.
- Q6. I'm worried about the number of times I go to the bathroom.
- Q7. I'm worried that I want to urinate suddenly.
- Q8. It's hard for me to get up at night to go to the bathroom.
- Q9. I'm restless because I feel there is feeling of incomplete emptying.
- Q10. I have incontinence and am disappointed.
- Q11. I'm worried without a urine pad.
- Q12. It takes time to get to the toilet and I get impatient.

Questions : How much does each question apply to your feelings in the past couple of days? This questionnaire is quite different (0 points), some are so (1 point), well yes (2 points), and that's right (3 points) to evaluate the total score (0 to 36 points).

CONCLUSION

In this study, the validity and reliability of the Emotional Response Scale related to going to the bathroom for Disability Stroke patient could verified (GFI 0.90, AGFI 0.85, CFI 0.96, RMSEA 0.08) (OABSS $r=0.44$; FIM $r=-0.54$, $p<0.01$) (Cronbach's α =0.90).

The following three points were considered as the usefulness of this scale.

1. The stroke patient him/herself can more easily talk about their worried about storage symptoms, shame of needing help to go to bathroom.
2. It makes it easier to communicate the uneasiness of urination objective and promptly to the medical teams.
3. We expect smoother, faster recovery of ADL from specialized/customized care for the patients.