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INTRODUCTION

- The aging of the population is an important factor contributing to the increased use of Emergency Departments (ED) by older individuals^[1, 2, 3].
- Population aging is also associated with an increased number of older individuals with cognitive impairment.^[4, 5]
- 26-40% of older adults who visit the ED have cognitive impairment^[6, 7, 8].
- These individuals frequently demonstrate complex challenges during their visit to the ED and make up a significant proportion of clients referred to occupational therapists (OT)^[9, 10].
- The role of the multidisciplinary team in the ED is to decide quickly and efficiently the orientation of the discharge from the ED^[1]. The OT's role is to evaluate the individuals' functional status.
- It is important to explore the extent to which the assessment of the functional status of older individuals with cognitive impairment by OTs in the ED might predict the orientation at discharge from the ED.

OBJECTIVE

- To describe the functional status and orientation (*hospital admission or return to home*) at discharge from the ED for older individuals with cognitive impairment.
- To explore the relationship between the functional status of these individuals and their orientation at discharge from the ED.

METHODS

- A convenience sample of 31 elderly individuals with cognitive impairment was recruited in the ED of an urban hospital.
- Cognitive impairment was confirmed with a score of less than 26 on the Mini Mental State Exam (MMSE), based on the NHC Classification^[11].
- All participants were assessed by an occupational therapist using the Functional Status Assessment of Seniors in the Emergency Department (FSAS-ED)^[12].
- Information about the orientation at discharge from the ED was obtained from the medical record.

RESULTS

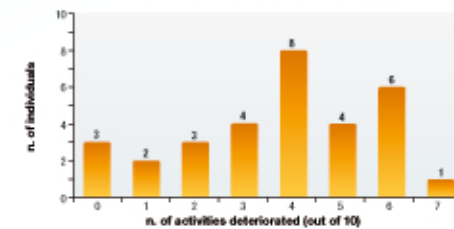
1 - Description of the participants (n=31)

Characteristics	n (%)	Mean ± S.D.; (range)
Gender		
Female	20 (64,5)	
Male	11 (35,5)	
Age		86,03 ± 5,77 ; (71-97)
Co-morbidities		6,26 ± 3,43 ; (2-17)
Number of medications		9,28 ± 4,70 ; (2-20)
Living situation		
Living alone	13 (41,9)	
Living with somebody	18 (58,1)	
Residence		
With services	11 (35,5)	
Without service	20 (65,5)	

2 - Description of participants' functional status

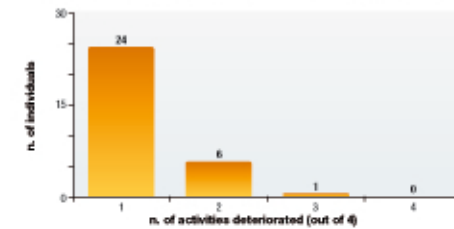
- The functional status assessment was obtained by comparing the usual level of functioning, prior to the current visit to the ED, with the current level of functioning or that during the event that motivated this visit to the ED.
- A negative score indicates that the functioning of the person has deteriorated.
- When the functioning of the person is unchanged, the score is 0.

ACTIVITIES AND PARTICIPATION - BASIC ACTIVITIES OF DAILY LIVING



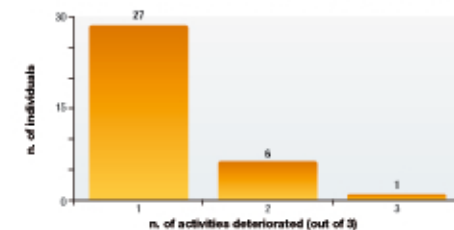
- For Basic activities of daily living, activities with the highest frequency of deterioration were related to mobility.

ACTIVITIES AND PARTICIPATION - INSTRUMENTAL ACTIVITIES OF DAILY LIVING



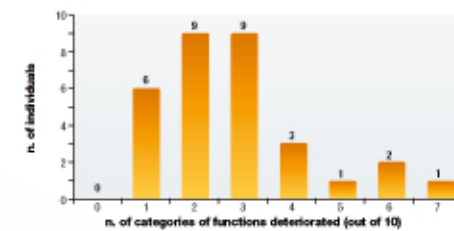
- For Instrumental activities of daily living subscale, activities with the highest frequency of deterioration were related to meal preparation.

ACTIVITIES AND PARTICIPATION - COMMUNICATION



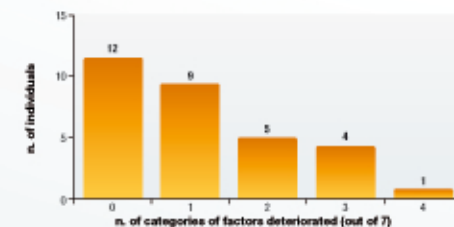
- For the Communication subscale, activities with the highest frequency of deterioration were related to expression

BODY FUNCTIONS



- For the Body functions subscale, categories of body functions with the highest frequency of deterioration were related to sensory functions and pain (54.8% of participants), musculoskeletal (45.2%), cardio-respiratory (41.9%) and vestibular (32.3%).

ENVIRONNEMENTAL FACTORS



- For the Environmental factors subscale, categories of environmental factors with the highest frequency of deterioration were related to technical system for mobility (35.5% of participants), formal support and relationships (32.3%) and informal support and relationships (25.8%).

RESULTS

3 - Orientation at discharge from the ED

- 54.8 % of the subjects were admitted to a care unit (hospital admission) and 45.2% returned to home.

4 - Relationship between functional status and orientation at discharge from ED

- Despite the caution necessary in the interpretation of the logistic regression results, they suggest that certain functional status components are significantly associated with the orientation at discharge from the ED. Specifically, individuals with activity limitations and deterioration in their environmental factors were less likely to return home.

RELATIONSHIP BETWEEN FUNCTIONAL STATUS AND ORIENTATION AT DISCHARGE FROM ED

	Univariate				Multivariate		
	OR ^a	95% CI ^b	p ^c	R ² ^a	OR ^a	95% CI ^b	p ^c
Score Act. and part.	3.74	1.50-12.8	0.003	33.3 %	2.14	0.70-8.1	0.19
Score Body function	2.88	1.17-10.1	0.02	21.8 %	1.72	0.52-7.4	0.39
Score Environ. factors	3.47	1.42-11.0	0.005	30.6 %	2.36	0.85-7.9	0.10
p ^d					0.006		
R ² ^a					43.9 %		

^aOR = standardized odds ratio, standard deviation = 2.38, 1.56, and 1.20 for score Act. and part., score Body Functions, and score Environ. factors respectively

^b95 % CI = 95 % profile-likelihood confidence interval

^cp = p-value from likelihood-ratio test

^dglobal p = p-value of the three degrees of freedom likelihood-ratio test for the three scores as a set

^eR² = Nagelkerke's R² for the multivariate model

Multivariate logistic models of score Act. and part., score Body functions and score Environ. factors taken two-by-two on Return to home (orientation at discharge from ED)

	Univariate			Multivariate		
	OR ^a	95% CI ^b	p ^c	OR ^a	95% CI ^b	p ^c
scoreap	2.99	1.04-11.1	0.04	2.63	0.96-9.3	0.06
scorefct	1.70	0.56-6.5	0.37	—	—	—
scorefe	—	—	—	2.37	0.86-7.9	0.10
p ^d				0.003		0.005
R ² ^a				35.9 %		41.8 %

^aOR = standardized odds ratio, standard deviation = 2.38, 1.56, and 1.20 for score Act. and part., score Body Functions, and score Environ. factors respectively

^b95 % CI = 95 % profile-likelihood confidence interval

^cp = p-value from likelihood-ratio test

^dglobal p = p-value of the three degrees of freedom likelihood-ratio test for the three scores as a set

^eR² = Nagelkerke's R² for the multivariate model

CONCLUSION

- These findings support the importance of including occupational therapists in multidisciplinary teams given their mandate to evaluate functional abilities.
- Future research with a larger sample, which takes into account the severity of cognitive impairment and the dwelling type of the individuals prior to their visit to the ED, should be conducted to confirm the possible relationships between the functional status and the orientation at discharge from the ED

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ACKNOWLEDGEMENTS

- Many thanks to the aged individuals and professionals of the CHUL Emergency Department who agreed to participate in the study.

Thank you to the following organizations for their support: CHU de Québec (Conseil Multidisciplinaire) and Université Laval (Association des chercheuses et chercheurs étudiant à la Faculté de médecine de l'Université Laval (ACCÉM) et Association des étudiantes et des étudiants de Laval inscrits aux cycles supérieurs (AELIES)).

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