

The feasibility of an Occupational Therapy intervention in people with delirium and dementia in nursing home settings



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INTRODUCTION: The non-pharmacological approach is the first step for delirium prevention and rehabilitation. Previous studies suggest that early psycho-cognitive and motor activation, performed by a multidisciplinary team, may reduce delirium duration and consequently the future disability. The aim of the current study is to assess the applicability and feasibility of an Occupational Therapy intervention focused on the non-pharmacological treatment of people with dementia and delirium in Nursing Home (NH).

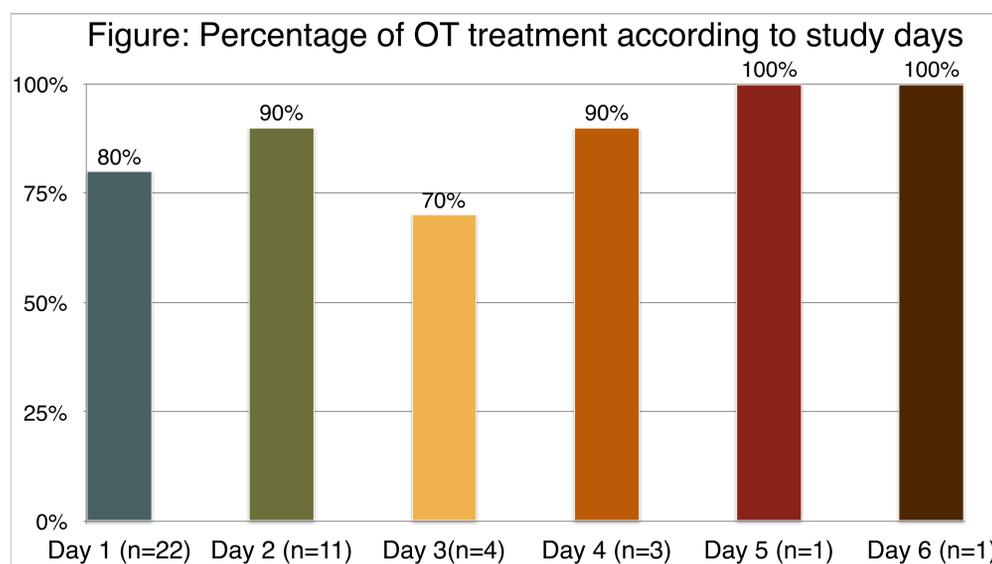
MATERIALS AND METHODS: We enrolled twenty-two patients with delirium and moderate dementia admitted to the NH of Fondazione Luigi Boni (Suzzara – Italy) between June and December 2017. Delirium was diagnosed with the DSM-5 criteria. Dementia was defined with a previous MMSE score $10 < x < 20$ and a Clinical Dementia Rating Scale 2-3. When delirium was detected the occupational therapist (OT) was activated. The intervention of the OT was structured in 60 minutes a day divided in two sessions (30' + 30'); 5 times a week until delirium resolution or for a total of maximum 3 weeks. In addition to the treatment protocol administered by the OT, the patients enrolled received a standard nursing treatment. At the beginning of each OT session the 4AT and m-RASS were administered; the procedures of the OT were standardized according to the level of agitation or sedation of the patient classified via m-RASS scale. The Canadian Occupational Therapy Performance Measure (COPM) was used to evaluate the proxy perception of performance in the daily activities at baseline and at delirium resolution.

	At baseline	At delirium resolution
Age	86.45 ± 6.46	-
Mini Mental State Examination	3.27 ± 3.67	9.60 ± 6.34
Barthel Index	12.59 ± 12.35	17.80 ± 16.67
N. Drugs	8.95 ± 2.95	-
D-O-M	20.86 ± 3.68	-
CIRS Severity	2.22 ± 0.32	2.17 ± 0.35
Tinetti Scale	2.27 ± 4.27	5.15 ± 5.32
NPI	21.36 ± 9.13	21.36 ± 9.13
COPM performance	0.86 ± 1.25	5.2 ± 2.78
COPM dissatisfaction	0.68 ± 1.46	4.85 ± 2.94

* Mean ± SD

RESULTS: The mean age was 86.45 ± 6.46 years. Patients' characteristics at baseline and at delirium resolution are described in the Table. Delirium resolved in 50% of the people (N=11) after 48 hours, in 18% (N=4) after 72 hours, and in 14% (N=3) after 96 hours. The OT treatment was feasible and one session was carried out in 95% of the patients on the first day, in 100% on the second and following days (Figure). The mean duration of the session was 14 ± 7 minutes. The COPM applied to assistant staff (proxy) at T0 and at delirium resolution showed a significant change both in the performance and in the satisfaction items (Table).

CONCLUSIONS: This study shows that an OT intervention is feasible in people with delirium and dementia in NH settings. The OT approach described can provide an individualized and custom treatment of the patient increasing the participation, the cognitive stimulation and the autonomy through the stimulation in the activities of daily living. Additionally, the collaboration and the education of the caregiver may potentially improve the awareness of the caregivers of management strategies to favor the discharge to home instead of the institutionalization. Future studies are necessary to evaluate the efficacy of the integration of OT in the management of delirious patients in NH settings.



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