CLINICAL MANIFESTATIONS

POSTER PRESENTATION

Behavioral and psychological symptoms of Alzheimer's disease during the COVID-19 pandemic in underserved settings

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Abstract

Background: The behavioral and psychological symptoms of dementia (BPSD) are characterized by disturbances in perceptions, thought contents, moods, and behaviors. The causes for these symptoms are connected to factors related to the people with dementia (PWD), his/her caregivers, and environmental factors as well as the interrelationship between these three. Disruptions of routine due to confinements during the COVID-19 pandemic has led to the onset/worsening of BPSD, thereby increasing distress levels in caregivers, and risks of self-injury, hospitalization, and death for PWD. Our aim is to describe the onset/ worsening of BPSD during COVID-19 pandemic confinement.

Method: This is a longitudinal study in patients and caregivers of people with Alzheimer's disease from the Instituto Peruano de Neurociencias in Lima, Perú. A structured confinement interview was delivered to caregivers exploring how the caregiver's activities have been affected or modified by the confinement measures. All patients have neuropsychological, neuropsychiatric, and functional assessments performed six months before the onset of the confinement. BPSD was assessed using the neuropsychiatric inventory questionnaire (NPI).

Result: A total of 91 patients with Alzheimer's disease and caregivers participated in the study. The average age of the patients was 73.4 years. Most patients had a CDR score of 0.5-1. Caregivers reported that the pandemic affected their mood by 74%. Percentage of time spent caring increased from 15% to 25% (p<0.001).

Worsening and new onset of behavioral and psychological symptoms were reported. The NPI (Fig 1.) and ADCS_ADL scores increased significantly during quarantine from baseline (6.6 and 10, respectively) (p<0.001). Delusions (75%), sleep disorder (71.7%), and hallucinations were the most frequently reported worsening symptoms. Sleep disorder (71.1%), agitation (68.6%) and depression (53.3%) were the most frequently reported new symptoms (p<0.001) (Table 1). Profile of BPSD did not vary according to the CDR score.

Conclusion: Quarantine induces increases in behavioral and psychological symptoms in patients with early stages of Alzheimer's disease. Caregivers spent more time with the patient with AD and their emotions were affected by the pandemic. We need to plan for strategies in order to address these needs.
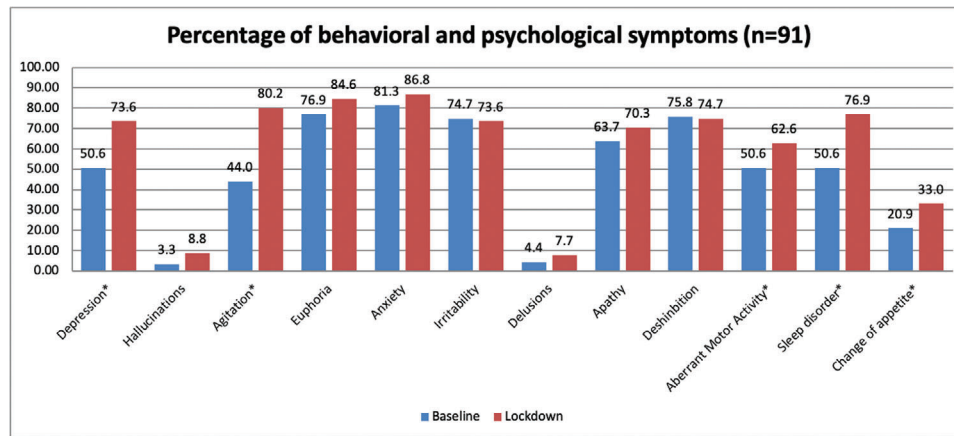
FIGURE 1

TABLE 1

Worsening and/or new onset BPSD in Alzheimer's disease patients

	New Onset	Worsening	ORc	p-value
Depression	53.3%	47.8%	8.00	**<0.001**
Hallucinations	5.7%	66.7%	11.00	0.219*
Agitation	68.6%	65.0%	17.50	**<0.001**
Euphoria	57.1%	51.4%	2.40	0.144
Anxiety	58.8%	59.5%	2.00	0.302
Irritability	21.7%	54.4%	0.83	1.000
Delusions	3.4%	75.0%	7.00	0.250*
Apathy	39.4%	53.4%	1.86	0.263
Deshinbition	31.8%	39.1%	0.88	1.000
Aberrant Motor Activity	33.3%	65.2%	3.75	**0.019**
Sleep disorder	71.1%	71.7%	4.00	**<0.001**
Change of appetite	26.4%	42.1%	2.38	**0.052**

ORc: Odds ratio, calculed by conditional logistic regression. * Yates correction