

# Delirium awareness day: a portuguese perspective

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## Abstract

Delirium is a syndrome characterized by impairment of awareness and inattention, that represents a change from the patient's baseline cognitive functioning. It is triggered by an underlying medical condition, reaching a prevalence of 24.7% in geriatric wards. However, undiagnosed delirium remains a reality among inpatient individuals, with an estimated frequency of 24.1%. The inappropriate knowledge of diagnostic criteria and standard screening tools was pointed out as a relevant contributing factor to this paradigm.

Liaison Psychiatry Services guarantee psychiatric approach and treatment to patients attending general hospitals. Considering that older adult patient care requires a well-trained and skilled team, the *Centro Hospitalar e Universitário de Coimbra* has a Geriatric Psychiatry Liaison Service, where delirium is one of the prevailing clinical conditions assessed by this team. The International Delirium Awareness Day is going to be worldwide celebrated on the 11th of March. Given that delirium has been consistently associated with the economic burden and adverse outcomes this symbolic day works as a huge opportunity to raise insight into the preventive strategies that could be implemented among healthcare professionals, patients, and caregivers. Within the Portuguese National Health System there is a need to build a set of systematic epidemiological data about delirium prevalence and incidence in the different settings and it would be essential the employment of a multicomponent intervention package delivered by a multidisciplinary team trained and competent in delirium prevention into routine care.

**Keywords:** awareness, delirium, liaison psychiatry, preventive psychiatry

## To the Editor

Delirium is an acute encephalopathy characterized by fluctuating impairment of awareness and inattention. It represents a change from the patient's baseline cognitive functioning that is triggered by an underlying medical condition (eg, surgery, infection, electrolyte imbalance, and medication). Although this syndrome may affect people of any age, it is far more frequent among older adults, reaching a prevalence of 24.7% in geriatric wards.<sup>1</sup>

In line with global demographic changes, the population of people aged over 65 years has been rising worldwide as a consequence of decreasing fertility together with lengthening life expectancy. This changing demography presents an important challenge to the health care systems since the number of people affected with this medical condition will undoubtedly rise.

Within the Portuguese National Health System, Liaison Psychiatry Services guarantee psychiatric approach and treatment to patients attending general hospitals. To that, the psychiatrist co-operates with a multidisciplinary team, which includes, in addition to consultation aspects, visits, and

discussion of ward cases and education programs for general staff to improve their basic psychiatric skills. These educational programs can enhance delirium recognition and management by non-medical staff and are focused on early identification of risk factors (eg, dementia, sensory deficits, altered sleep-wake cycle, dehydration, and polimedication) and assessment of delirium symptoms with bedside instruments.

Considering that older adult patient care requires a well-trained and skilled team, the *Centro Hospitalar e Universitário de Coimbra* has a Geriatric Psychiatry Liaison Service, where delirium is one of the prevailing clinical conditions assessed by this team.<sup>2</sup> Hyperactive and mixed delirium are the most common subtypes diagnosed by Geriatric Liaison Psychiatry, suggesting that hypoactive forms are largely missed by clinicians in medical and surgical wards. Currently, undiagnosed delirium remains a reality among inpatient individuals, with an estimated frequency of 24.1%.<sup>3</sup> In the hospital setting, the inappropriate knowledge of diagnostic criteria and standard screening tools was pointed out as a relevant contributing factor to this paradigm. When the mental status examination is performed, a minority of the delirious patients is able to cooperate with the Mini-Mental State Examination, supporting the idea that these diagnostic tools are inappropriate to screen acutely ill older patients. The Confusion Assessment Method (CAM), and the 4 'A's Test (4AT) have been widely used as delirium assessment instruments. The former is a standardized diagnostic algorithm with high sensitivity (94% to 100%), high specificity (90% to 95%), and high inter-rater reliability, which is usually executed in 5–10 minutes and comprises four major features: 1) acute onset and fluctuating course; 2) inattention; 3) disorganized thinking; and 4) altered level of consciousness. Delirium is diagnosed when patients present with features 1 and 2 plus feature 3 or 4.<sup>4</sup> However, when this diagnostic instrument is used by untrained nurses delirium goes often unrecognized.<sup>5</sup> There are some additional tools that were developed as CAM variations, such as CAM for Intensive Care Unit<sup>6</sup> and 3-Minute Diagnostic

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Porto Biomed. J. (2021) 6:4(e139)

Received: 9 March 2020 / Received in final form: 5 November 2020 / Accepted: 13 February 2021

<https://dx.doi.org/10.1097/j.pbj.000000000000139>

Interview for CAM<sup>7</sup> (3D-CAM). The 4AT is a brief delirium screening test, generally performed in less than 2 minutes, that does not require special training. It consists of four topics: 1) assessment of the alertness level; 2) brief cognitive screening using the Abbreviated Mental Test; 3) attention evaluation through Months Backwards Test, and 4) acute onset and fluctuating course. The results range from 0 to 12 points and a score of 4 or more suggests possible delirium. When CAM is performed by a trained health professional, both tools have similar performances.

Lately, a new and ultra-brief (usually taken less than 1 minute to be fully completed) 3-item screening tool<sup>8</sup> was proposed and it aims to diagnose delirium superimposed on dementia in a sensitive way.

The International Delirium Awareness Day is going to be worldwide celebrated on the 11th of March. Given that delirium has been consistently associated with the economic burden and adverse outcomes (namely, functional impairment, progression to dementia, and increased mortality) this symbolic day works as a huge opportunity to raise insight into the preventive strategies that could be implemented among healthcare professionals, patients, and caregivers.<sup>9</sup> Since non-pharmacological prevention approaches were mentioned to improve clinical outcomes cost-effectively, there is a need to build a set of systematic epidemiological data about delirium prevalence and incidence in the different settings within the Portuguese National Health System<sup>10</sup> and it would be essential the employment of a multicomponent intervention package delivered by a multidisciplinary team trained and competent in delirium prevention into routine care.

## Conflicts of interest

None.

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