

# Dementia Staging in Relation to Prognosis and Psychoeducation: A Case Report

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## ABSTRACT

People with dementia may experience behavioral changes such as restlessness, aggression, and anxiety. Families of people with dementia often feel a great emotional burden because they have to care for and assist the patient in daily activities. The importance of education about the progressive course of dementia can help families prepare mentally and physically to care for patients with dementia.

**Case Report:** A female, 84 years old, seemed unfocused. The patient talked a lot and said she wanted to go home, was difficult to direct, and did not obey orders. Her forgetfulness started 3 years ago and has worsened since then. Cognitive function was poor. The patient's mood is irritable, affections are narrowed, and incongruent. The thought process was characterized by non-logical, non-realistic thought forms, irrelevant thought flow, and suspicious thought content. There were impressions of visual and auditory hallucinations. The instinctual drive was found to be mixed-type insomnia, hypobulia was absent, and raptus was present. Psychomotor calm with discernment CAM = 4, RASS = +3. MMSE examination 5 and FAST 6C.

**Discussion:** Staging procedures have proven to be a valid and reliable method to assess the magnitude of pathology of dementia-related conditions. Global staging scales such as GDS have important

advantages in the assessment of dementia. The latter is called Functional Assessment Staging or FAST. FAST can be used as a staging measure independent of the magnitude of dementia pathology or as part of the GDS Staging System. This scale is strongly associated with clinical symptoms, and behavioral, and functional changes in progressive degenerative dementia, particularly Alzheimer's disease. Psychoeducation in dementia is a group-based intervention that provides information about dementia and its treatment. Psychoeducation materials for families with dementia include information about dementia and its treatment. Some things that can be used as psychoeducation materials for families with dementia include: using simple language to communicate with the patient and establishing daily routines, such as eating, bathing, sleeping, and others. Help the patient to perform daily activities independently.

**Conclusion:** It is important to understand that staging is related to the treatment management of the progression of dementia. The prognosis of dementia is poor as over time there will be worsening of symptoms characterized by a decline in cognitive function. The goal of psychoeducation is to help assist the family to understand and cope with situations associated with dementia.

**Keywords:** Staging, Dementia, Prognosis, Psychoeducation

## INTRODUCTION

In the DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, 5th edition), dementia is described as a major neurocognitive disorder characterized by a significant decline in at least one cognitive area, such as memory, language skills, ability to solve problems, spatial orientation, time orientation, or ability to perform daily activities. Vascular dementia is considered quite high in Indonesia, 2013 data from the Indonesian Stroke Registry reported that 60.59% of stroke patients experienced cognitive impairment after discharge from hospital care. The prevalence of dementia may vary depending on factors such as population age, genetic factors, lifestyle, and environmental factors. Therefore, dementia prevalence data may differ from one region to another. People with dementia may experience behavioral changes such as restlessness, aggression, and anxiety. Families of people with dementia often feel a great emotional burden because they have to care for and assist the person in daily activities. People with dementia often experience difficulties in social interaction, and this can affect relationships with family and friends. This can lead to loneliness and social isolation for the person and their family. The importance of education about the progressiveness of the dementia disease course can help families prepare mentally and physically to care for patients with dementia. Dementia staging is the process of determining the severity of dementia. Dementia staging can help families understand the patient's condition and determine appropriate care. There are several types of dementia staging, such as Clinical Dementia Rating (CDR), Global Deterioration Scale (GDS), and Functional Assessment Staging Test (FAST)<sup>1,2</sup>. This literature review provides an explanation of dementia staging concerning prognosis and psychoeducation. The purpose of writing this literature review is to add insight and

knowledge about as part of the stages or progressiveness of each stage in dementia.

## CASE REPORT

Female, 84 years old, unemployed, Married, Hindu, Bali. The patient was interviewed lying on the bed with an intravenous and urine catheter. The patient was referred by the Cardiology Department because of anxiety.

There was a confused expression looking up and to the side with a blank stare. She could say her name correctly, but could not answer her age and who accompanied her. The patient did not remember his morning meal and what he had done in the past week. The patient was annoyed, answering in a rude tone. Feels like making canang and wants to get off the bed. The patient answered that she did not know and talked to herself more. The patient seemed unfocused during the interview. The patient talked a lot and said he wanted to go home, was difficult to direct, and did not obey orders. This has only been felt since 2 days ago. The patient started to become forgetful 3 years ago and has worsened until now. The patient needs to be reminded to eat because if not reminded, the patient forgets to eat so the patient's eating hours are irregular, sometimes in the early hours of the morning the patient asks for food. Often forgets to take a shower, seems to have difficulty falling asleep at night, and often wakes up in the middle of the night and walks around. Everyday activities can still be done at home for light activities, occasionally looking for firewood next to the house. Often brings unused items home. When asked, the patient also did not know why the patient brought the item. Patients but often feel forgetful and difficult to give orders, if asked to do something must be conveyed repeatedly. sometimes patients often talk like mumbling while doing their work. The patient has known hypertension since 5 years ago.

From the results of the general physical examination, there is hypertension and neurological within normal limits. The

patient's psychiatric status is found to be reasonable appearance according to illness, facial romance according to age looks confused, and verbal and visual contact is lacking. The patient's consciousness was foggy (fluctuating) and the patient's cognitive function was poor. The patient's mood was irritable, narrowed, and incongruent. The thought process was characterized by non-logical, non-realistic thought forms, irrelevant thought flow, and suspicious thought content. There were impressions of visual and auditory hallucinations. The instinctual drive was found to be mixed-type insomnia, hypobulia was absent, and raptus was present. Psychomotor calm with discernment 1. CAM examination = 4, RASS = +3. MMSE 5 and FAST 6C examinations were performed on April 25, 2023, when the patient's delirium condition had improved.

## DISCUSSION

The patient had a chronic course of the disease where symptoms had appeared more than 6 months before the diagnosis was made. The dementia experienced by the patient causes disability in elderly people. These disabilities include functional disabilities and memory disabilities. Dementia can be caused by various factors, and the main cause of dementia is the presence of a neurodegenerative disorder. The description of dementia is generally divided into two broad categories, namely global staging and more specific staging (axial or multi-axial staging). In Figure 1 below, a comparison of dementia staging systems using the most widely used mental status assessments in dementia is shown<sup>1,2</sup>.

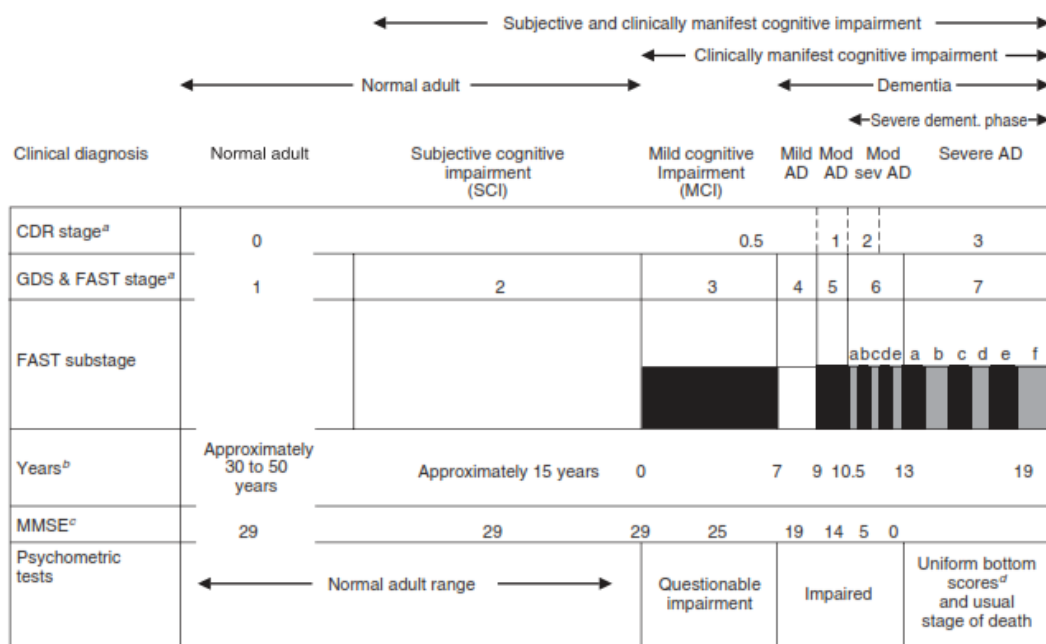


Figure 1. Typical time course of normal brain aging<sup>1</sup>

Figure 1 illustrates some of the key potential advantages of staging. These advantages include: (i) it can identify premorbid, but potentially overt conditions that may be associated with the subsequent evolution of dementia, such as Subjective Cognitive Impairment (SCI), conditions that cannot be distinguished using mental status or

psychometric tests; (ii) it can be particularly useful in identifying subtle predementia states, such as mild cognitive impairment (MCI), which on mental status assessment and psychometric tests are generally within the normal range. Consequently, mental status assessments and psychometric tests are not reliable markers<sup>5</sup>; and (iii) staging

can track 50% of the time course of potential dementias, such as Alzheimer's disease (AD), where mental status assessments are almost always at the bottom score (zero)<sup>3,4</sup>. Staging procedures have proven to be a valid and reliable method to assess the magnitude of pathology of dementia-related conditions. Global staging scales such as the GDS have important advantages in the assessment of dementia. First and foremost, these scales are strongly associated with clinical symptoms, and behavioral, and functional changes in progressive degenerative dementias, particularly Alzheimer's disease<sup>2</sup>. Consequently, it can prevent misdiagnosis. Unlike many other mental status and dementia screening instruments, the global stage is relatively stable over time and relatively resistant to practical effects. Equally important, global staging instruments are minimally influenced by educational background and socioeconomic status, whereas mental status and similar assessments are heavily influenced by these factors.

The multi-axial functional component results in the most detailed hierarchical staging of progressive dementia proposed to date, with 16 stages and sub-stages of progressive functional change. The latter assessment is called Functional Assessment Staging or FAST<sup>9</sup>. FAST can be used as a staging measure independent of the magnitude of dementia pathology or as part of the GDS Staging System. The advantages of the FAST staging procedure are: (i) FAST is able to describe the entire course of brain aging associated, such as cognition-based functional changes and subsequent Alzheimer's-type dementia, in an ordinal (i.e. hierarchical) manner in unprecedented detail; (ii) The scale can help distinguish Alzheimer's-type dementia from other dementing processes; (iii) The scale can assist in identifying premature and potentially reversible functional changes in AD patients (eg: (iv) the Scale allows retrospective as well as prospective examination of the time course of AD, and

(v) the Scale is the only current measure that allows detailed staging of AD severity<sup>1</sup>. Psychoeducation in dementia is a group-based intervention that provides information about dementia and its treatment. A randomized controlled trial study found psychoeducation to be effective in reducing physical and emotional problems and caregiver burden. Another study found that psychoeducational interventions can influence caregiver knowledge in caring for dementia patients. Not many studies have been found related to the effect of psychoeducation on the ability of families as caregivers in caring for elderly dementia at home<sup>7</sup>. Psychoeducation materials for families with dementia include information about dementia and its care. Some things that can be used as psychoeducation materials for families with dementia include: Using simple language to communicate with the patient. Establishing daily routines, such as eating, bathing, sleeping, and others. Help the patient to perform daily activities independently<sup>8</sup>.

## CONCLUSION

Currently, there are several different staging systems for dementia, including the Global Deterioration Scale (GDS), Clinical Dementia Rating (CDR), and Functional Assessment Staging (FAST). Each system has advantages and disadvantages in assessing the severity of dementia. In providing a picture of the course of dementia such as AD, from early to late clinical symptoms, staging is very useful. Staging is also very useful in assessing various specific points in the evolution of the dementia process. It is important to understand that staging is related to the treatment management of the progression of dementia. The prognosis for dementia is poor as over time there will be a worsening of symptoms characterized by a decline in cognitive function. Psychoeducation in dementia is a group-based intervention that provides information about dementia and its treatment. The goal of psychoeducation is to

help families understand and cope with situations associated with dementia.

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