

VASCULAR AGING AND DEMENTIA

-the interdisciplinary
modifiable landscape

KRKA'S INTERNATIONAL SYMPOSIUM
08 MAY 2021, SKOPJE



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Prof. d-r ROZA KRSTESKA

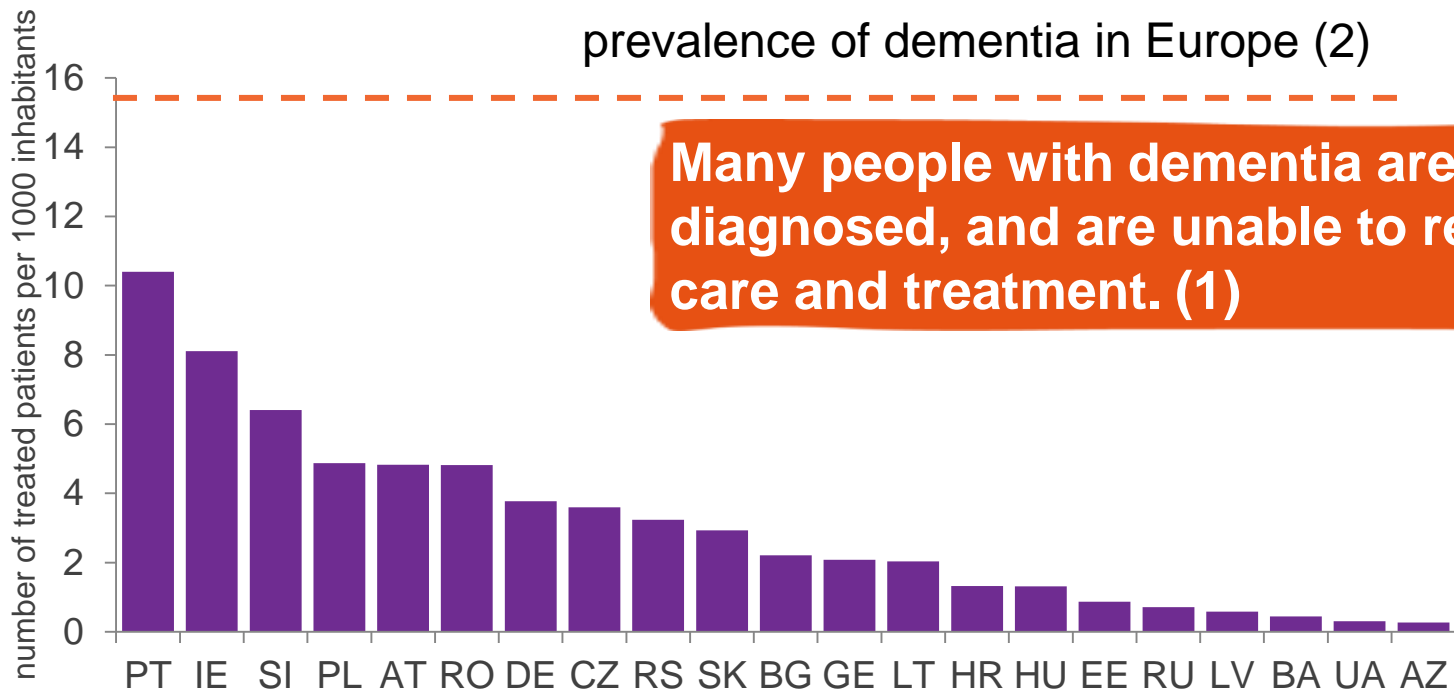
psychiatrist

CENTER FOR FAMILY HEALTH

HELIO MEDIKA 2, Skopje

New insights into Alzheimer's disease, but the reality...?

There is still a large gap between the prevalence of dementia and its treatment



1. Alzheimer's Disease International. World Alzheimer Report 2016 [Internet]. Available from: <https://www.alz.co.uk/research/world-report-2016> 2. Alzheimer Europe. Country comparisons - 2013: The prevalence of dementia in Europe [Internet]. Available from: <http://www.alzheimer-europe.org/Policy-in-Practice2/Country-comparisons/2013-The-prevalence-of-dementia-in-Europe> 3. Graph: CEGEDIM, ePharma Market, INSIGHT Health, INTELLIX, HmR, MEDICUBE, PHARMSTANDARD, PharmaZOOM, Quintiles IMS 1-9 2016.

Many patients are already in the moderate or severe stage of the disease. (1)



Even in most high income country settings, where only around 50% of people living with dementia receive a diagnosis. In low and middle income countries, less than 10% of cases are diagnosed.

1. Fillit H M et al. Recommendations for Best Practices in the Treatment of Alzheimer's Disease in Managed Care. The American Journal of Geriatric Pharmacotherapy 2006: 1543-5946 2. 1. Dementia statistics. Alzheimer's Disease International. [Internet]. . Available from: <https://www.alz.co.uk/research/statistics> 3. Lopponen M et al. Diagnosing cognitive impairment and dementia in primary health care – a more active approach is needed. Age and Ageing 2003; 32: 606–612

World Alzheimer Report 2019 Attitudes to dementia-Alzheimer's Disease International (ADI) 70,000 people, 155 countries and territories



the key findings

-80% of the general public are concerned about developing dementia and 1 in 4 people think that there is nothing we can do to prevent dementia.

-75% carers globally say “I am often stressed between caring and meeting other responsibilities” and over 50% of carers said their health suffered as a result of their caring responsibilities. Are we doing enough for carers?

-62% of healthcare providers worldwide think that dementia is part of normal aging.

-40% of the general public think doctors and nurses ignore people with dementia – time for primary healthcare practitioners to look closely at their practice and for governments to increase dementia training.

Alzheimer Europe, 21 April 2021. Alzheimer Uniti completes study on impact of COVID-19 restrictions on people with dementia and carers.

- The COVID-19 pandemic has caused big changes for families. A study, 160 persons with dementia, 91% with Alzheimer's and 9% with vascular and other dementia.
- People with dementia have been heavily impacted by isolation, and contributing to the onset or worsening of BPSD (anxiety, irritability, aggression) and of cognitive disorders, creating a greater workload and higher stress levels for carers.
- About 100 days after the lockdown, the cognitive symptoms worsened in 54% of the participants. Behavioural symptoms worsened in 53% of the people and decline in motor skills.
- This disruptive time has greatly affected the clinical course of the disease and people's quality of life, but **distance support** has helped to mitigate BPSD. This support has also reduced some anxiety and uncertainty among carers. Nothing, however, can replace face-to-face contact.

Alzheimer Europe, 06 April 2021

<https://www.thelancet.com/action/showPdf?pii=S2215-0366%2821%29000845>

- Clinical study shows that COVID-19 raises the risk of psychiatric and neurological disorders, including dementia are associated with an increased risk of severe COVID-19.
- People who have had COVID-19 may be at increased risk of developing depression, stroke and dementia among other conditions.
- Focusing on a time period between January and December 2020 among over 236,000 people diagnosed with COVID-19 during this time period, over **33% received a psychiatric or neurological diagnosis within 6 months**, with 12.84% receiving their first such diagnosis. The most common diagnosis overall was **anxiety disorder, affecting over 17% of individuals**.
- COVID-19 severity influenced the likelihood of diagnosis: people who had been admitted to intensive care and/or suffered from **delirium** due to COVID-19 were at greater risk. For example, **2.66% of people aged over 65 years received a first diagnosis of dementia after recovering from COVID-19, increasing to 4.72% of those who had delirium due to COVID-19**. More extended studies are now required, to see whether this increased risk remains in the longer term.

Alzheimer's disease is thought to begin 20 years or more before Risk factors for dementia



- **Physical inactivity**
- **Smoking**
- **Excessive alcohol consumption**
- **Air pollution**
- **Head injury**
- **Less education**
- **Obesity**
- **Hypertension**
- **Diabetes**
- **Hearing impairment**
- **Sleep duration of 6 hours or less a night** for those age 50 to 60 was associated with a 30% increase risk of late-onset dementia compared to sleep of seven hours.
- **Depression** is part of the prodrome of dementia. It is important to treat depression because is associated with increased disability, physical illnesses and worse outcomes for people with dementia.
- **Patients diagnosed with depression develop dementia at 2.5-6 times the rate of the general population.**
- **Infrequent social contact**-It is well established that social connectedness reduces the risk of dementia. Social contact enhances cognitive reserve or encourages beneficial behaviours.

Case report

NN a 73-year-old female patient, living in a village in Skopje, in a family house with her husband. 8th grade, mother of 2 children, worked in agriculture, right-hand, does not smoke, does not consume alcohol.

Family anamnesis: her father had CVI, mother dementia.



Anamnesis vitae (medical history): hypertension over 12 years, it has often been examined for complaints of abdominal pain, cholecystectomy (long time ago).



First hospitalization realized April 2021, lasting 8 days, Department of Psychogeriatric , PHI Psychiatric Hospital "Skopje".

Heteroanamnesis: forgetfulness over 2 years. She did not know the children, she didn't cook for 1 year. She argued with her husband when she was given the medicine (she complained that she have pain in the stomach from medications) and she refused the medication (that was a main motive for hospitalization) .

Avoidance of unnecessary hospitalization is a policy priority in many countries

Clinical picture:



The patient was upset at the admission, does not know the address where she lives, knows how old she is and when she was born, does not know what month and year is now. The afternoon was agitated and destructive on the door and windows, wanted to go home.

The next day, psychomotor calm, as in the next 8 days of stay, she received the therapy properly, eating and sleeping properly, wanted to go home, when the children called showed emotions, didn't complain about any pain. She didn't know what month and year it is now and gave incorrect information about children.



- **Somatic and neurological status:** HTA, **apraxia, agnosia, acalculia, anomia.**
- **Psychiatric status:** disoriented in time and space, incapable of valid data about herself and loved ones. Present some confabulations, absent delusional contents or hallucinations. Insufficient affective expression, but when children call on the phone, emotions arise with a subdepressive trait.
- **Laboratory blood tests:** cholesterol 6.2 (to 5.2) LDL 4.3 (to 3.7),
- **Neuropsychological testing** with marked reductive changes in all examined functions, disoriented in time and space, memory functions are markedly compromised for both verbal and for visual contents, deviations in speech-language status in the examined reading functions, written speech and triple order.
- Continuous supervision is recommended and family care. Appropriate controls by a neurologist and internist and regular check-ups by a psychiatrist

Individuals with cognitive impairment, their family members, and their care providers have all identified “quality of life” as a central goal in the treatment of dementia(1)



There is currently no cure for dementia. **But there are medicines and other treatments that can help with dementia symptoms and “quality of life” (2, 3).**

Acetylcholinesterase inhibitors -Donepezil, rivastigmine and galantamine are used to treat the symptoms of **mild to moderate Alzheimer's disease**. Donepezil is also used to treat more **severe Alzheimer's disease**.



There's evidence that these medicines can also help treat dementia with Lewy bodies and Parkinson's disease dementia, as well as people who have a **mixed dementia diagnosis of Alzheimer's disease with vascular dementia**.

Memantine -This medicine is given to people with **moderate or severe Alzheimer's disease, dementia with Lewy bodies and those with a combination of Alzheimer's disease and vascular dementia**.

1. Logsdon RG, McCurry SM, Teri L. Evidence-Based Interventions to Improve Quality of Life for Individuals with Dementia. *Alzheimers care today*. 2007; 8(4): 309–318. 2. What are the treatments for dementia? [internet]. NHC. Available from: <https://www.nhs.uk/conditions/dementia/treatment/>. 3. Kaufman P. Dementia Treatment: Medication and Other Interventions Can Improve Quality of Life [internet]. Everyday Health [cited19.6.2019] Available from: <https://www.everydayhealth.com/dementia/treatment-medication-other-interventions-can-improve-quality-life/>.

Figure 1

Neuropsychiatric Clusters in Dementia



20-40% of cognitively impaired elderly persons exhibit depression or depressive symptoms



Alzheimer's Association International Conference on AD (ICAD) 2011 Paris, C. Lyketsos at Johns Hopkins University, Baltimore, Maryland:

Depression worsens dementia and also accelerates the conversion of mild cognitive impairment to dementia, highlighting the importance of treating it effectively.

The overlap between dementia and depression continues to be an important area, and untreated depression will exacerbate and amplify memory loss.

If present, depression in mild cognitive impairment and early Alzheimer disease should be treated with appropriate non-pharmacologic and pharmacologic approaches.

Neuropsychiatric Symptoms Common Up to 90% of patients with dementia experience neuropsychiatric symptoms, which include agitation, mood disorders, sleep disorders, psychotic symptoms, and excessive verbal or physical motor activity.

The FDA a "black box" warning about antipsychotic drugs for their risks and a reminder that they are not approved to treat dementia symptoms.

WARNING: INCREASED MORTALITY IN ELDERLY PATIENTS WITH DEMENTIA RELATED PSYCHOSIS (e.g., heart failure, sudden death) or infectious (e.g., pneumonia).

JAMA Network Open. 2020;3(4). Rubino et al. **Association of the US FDA Antipsychotic Drug Boxed Warning With Medication Use in Elderly P With Dementia.** Compared with before 2005, AAP use (from an annual slope of 0.99 to -0.18 percentage points), cerebrovascular events (0.75 to -0.50 percentage points), and falls and/or fractures (-1.72 to -0.40 percentage points) **decreased** and opioid use (0.04 to 1.29 percentage points), antiepileptic use (-0.42 to 1.21 percentage points), cardiovascular events (-0.13 to 1.30 percentage points), and 2-year mortality risk (-0.68 to 0.18 percentage points) **increased**.

THE AMERICAN PSYCHIATRIC ASSOCIATION PRACTICE GUIDELINE ON THE USE of Antipsychotics to Treat Agitation or Psychosis in Patients with Dementia

Are not intended to substitute for the independent professional judgment of the treating provider.

APA recommends:

Statement 5. that nonemergency antipsychotic medication should only be used for the treatment of agitation or psychosis in patients with dementia when symptoms are severe, are dangerous, and/or cause significant distress to the patient. (1B)

St. 8. that if a risk/benefit assessment favors the use of an antipsychotic for BPSD, treatment should be initiated at a low dose to be titrated up to the minimum effective dose as tolerated. (1B)

St.12. that in patients with dementia who show adequate response of behavioral/psychological symptoms to treatment with an antipsychotic drug, an attempt to taper and withdraw the drug should be made within 4 months of initiation, unless the patient experienced a recurrence of symptoms with prior attempts at tapering of antipsychotic medication. (1C)

St. 14. that in the absence of delirium, haloperidol should not be used as a first-line agent. (1B)

St. 15. that in patients with dementia with agitation or psychosis, a longacting injectable antipsychotic medication should not be utilized unless it is otherwise indicated for a co-occurring chronic psychotic disorder. (1B)

Tony Bennett reveals battle with Alzheimer's disease: 'Life is a gift'



Legendary jazz and popular musician celebrates his **94th birthday** on Aug. 3, 2020.

He was first diagnosed in 2016. Gayatri Devi, a neurologist, who diagnosed Bennett, "He is doing so many things, at 94, that many people without dementia cannot do. He really is the symbol of hope for someone with a cognitive disorder."

Crow: "It's no fun arguing with someone who doesn't understand you... But I feel badly talking about it because we are so much more fortunate than so many people with this diagnosis. We have such a good team. "There's a lot about him that I miss," she said. "Because he's not the old Tony anymore... But when he sings, he's the old Tony."



Thank you