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## Introduction

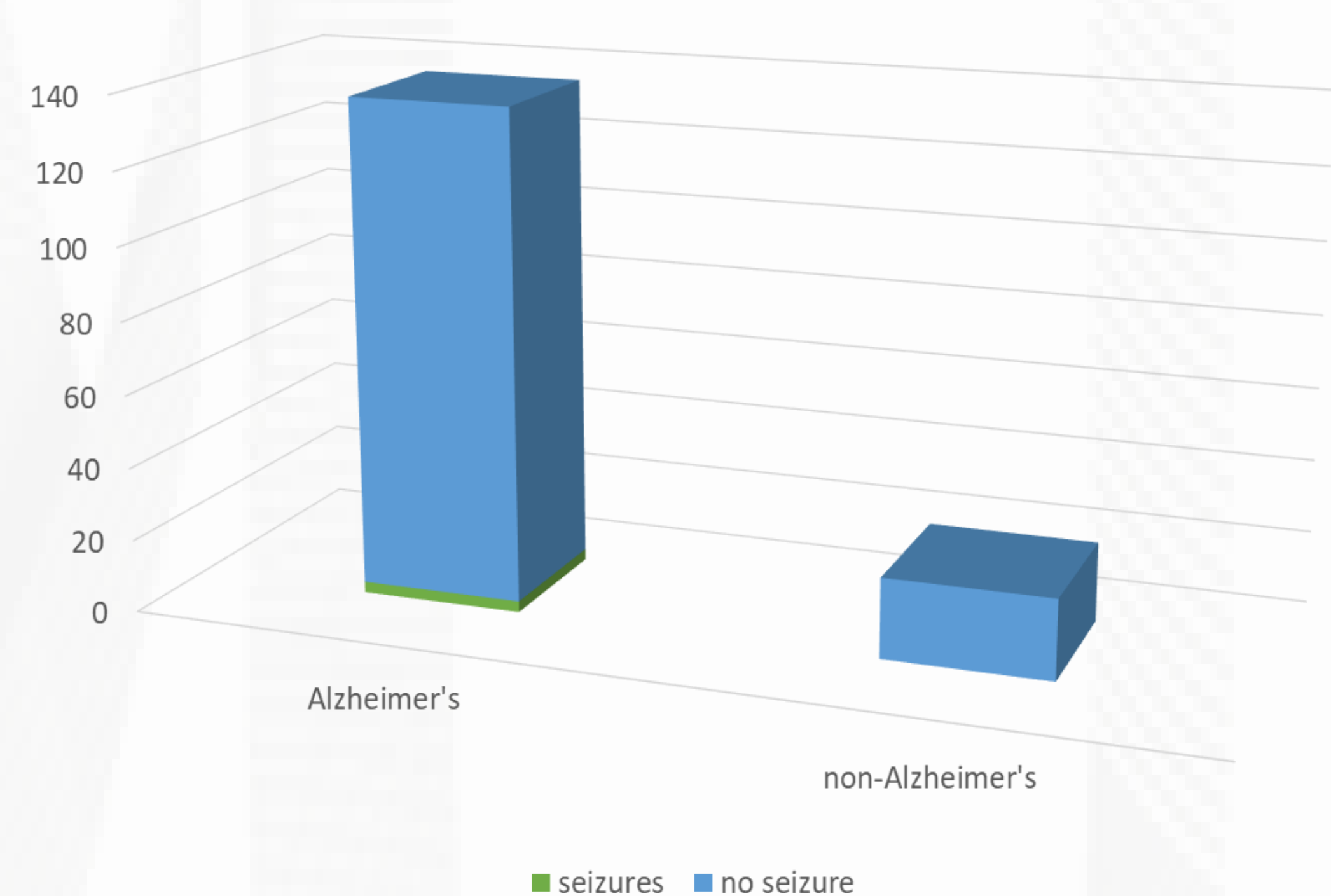
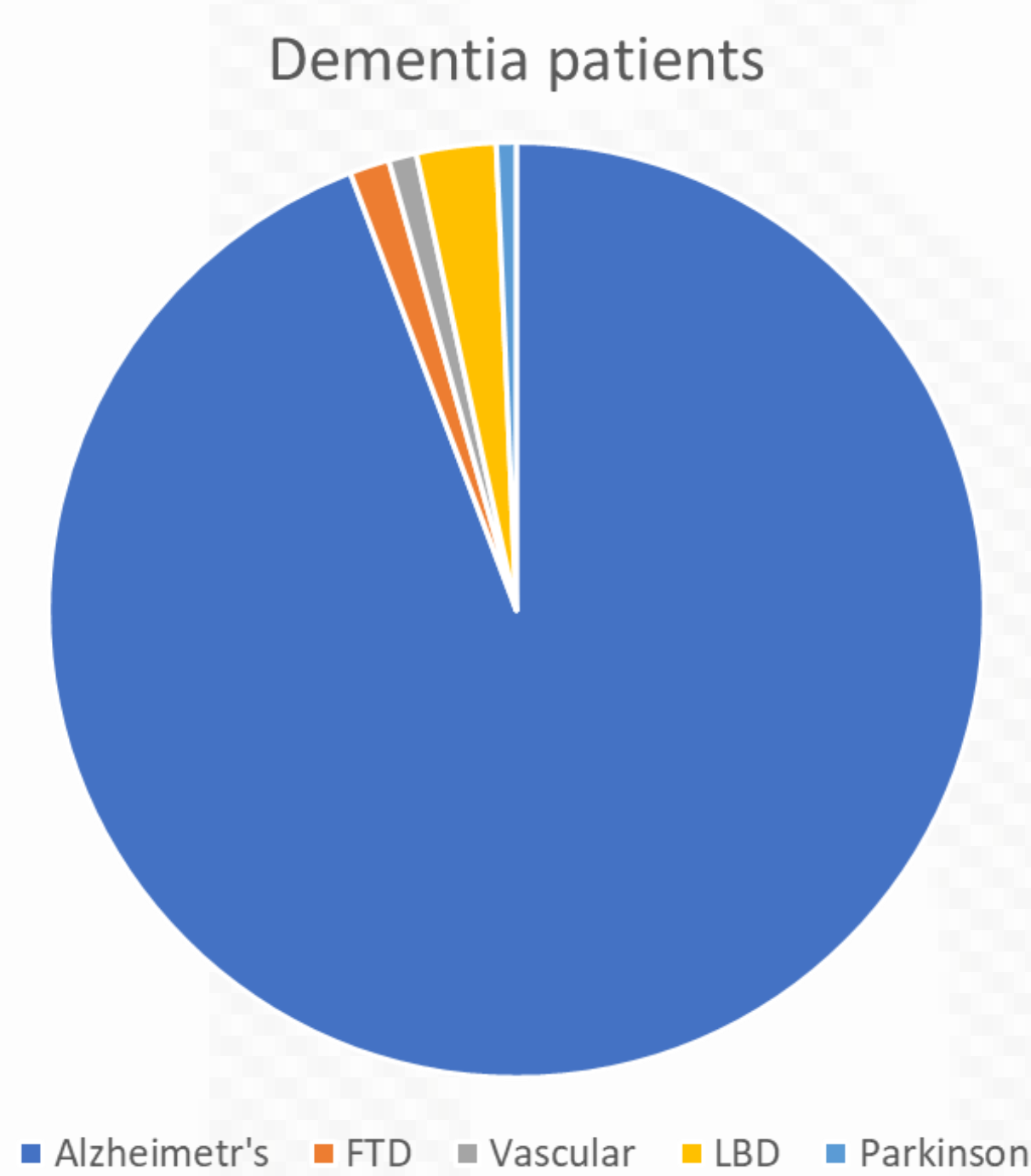
Dementia is a clinical syndrome characterized by progressive cognitive decline. Alzheimer's Disease, Vascular Dementia, Dementia with Lewy Bodies and Frontotemporal Dementia are types of dementia. Seizure, is a chronic disease caused by the sudden discharge of neurons. Seizures have many different causes, and can also occur in neurodegenerative diseases. Epilepsy can affect the prognosis of dementia. Therefore, it is important to investigate how much the frequency of epilepsy increases in different types of dementia.

## Methods

As a result of power analysis, it was determined that at least 138 dementia patients should be included in the study. Patients diagnosed with dementia who consecutively applied to our neurology outpatient clinics since 01.06.2022 were included in this study. The patient and / or her relatives were asked about the diagnosis of epilepsy and drug use. Also data of those who applied to the hospital before June has been looked at Nucleus system. The data has been analyzed with the IBM SPSS Statistics 22.0 package program. The distribution of the data has been checked with the chi-square test.

## Results

Totalle, 159 dementia patients were included in this study. There were 92 female (%57,9), 67 male (%42,1) and the average age was 74,11. 137 patients have Alzheimer's Disease (%86,2) and 22 patients have non-Alzheimer Disease (%13,8). 12 of whom have Frontotemporal Dementia (%7,5), 4 of whom have Dementia with Lewy Body (%2,5), 5 of whom have Vascular Dementia (%3,1), 1 of whom has Parkinson Dementia (%0,6). Only 3 of dementia patients had epileptic seizures (%1,9) and all of them have Alzheimer's Disease. The frequency of epileptic seizures among Alzheimer Disease patients is 2,2% and 0% in non-Alzheimer's patients. There was not a significant relationship was found between epilepsy and types of dementia (p=0.638).



## Conclusion:

According to Impeld et al. study, as compared to patients without dementia, the relative risk estimate of developing seizure in association with Alzheimer's Disease and Vascular Dementia were 6.6 and 5.7 respectively. In the study of Marawar et al., the frequency of seizures in patients with clinically defined dementia with Lewy bodies was found to be 2.6%. In the study of Beagle et al., the seizure incidence rates, relative to control populations, were 10 fold in AD and LBD, and 6 fold in FTD. Nevertheless, in our study no significant relationship was found between the types of dementia and epilepsy. If the study is done with more participants, different results can be obtained.

## References:

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