

Demenssykdom hos yngre

-

epidemiologiske aspekter

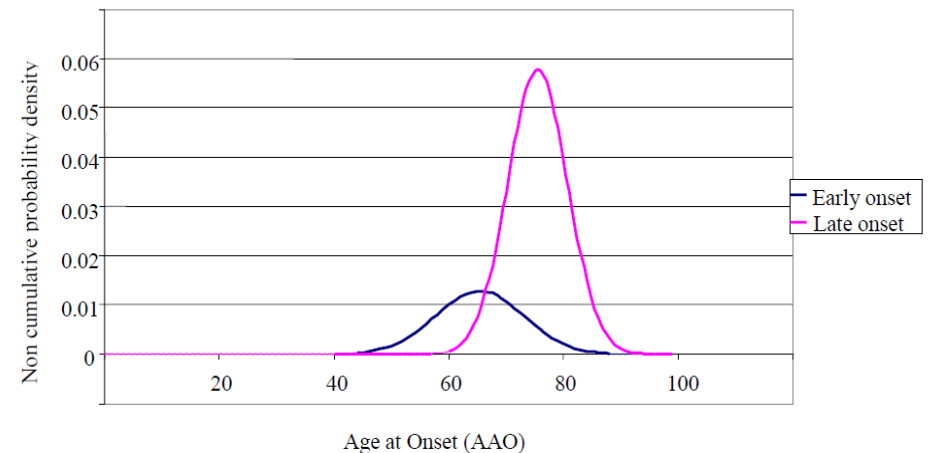
LIS nevrologi og psykiatri, Sykehuset Levanger

PhD-kandidat, NTNU

Definisjoner

- «Young/ early onset dementia»
 - Debut av symptomer < 65 år
 - Diagnose < 65 år
- «Late onset dementia»

G. Spalletta *et al.* / *Advances in Alzheimer's Disease 2* (2013) 40-47



Young Onset Dementia (YOD)

Karakteristika

- Friskere kropp og hjerne
- Høyere utdanning
- Yrkesaktive

- Genetikk
- Etiologisk heterogenitet
- Atypiske kliniske presentasjoner
- Rene patologier

- Depresjon
- Innsikt
- Kommunal oppfølging lite tilpasset

Alzheimers sykdom

- Nevropatologi
 - Høyere amyloid byrde
 - Parietal og posterior affeksjon
 - Acetylcholin nevrotransmittor lavere
- Symptomer
 - Afasi
 - Apraxi
 - Visospasial svikt
 - Eksekutiv svikt
 - Dyskalkuli
- Reservekapasitet
- Progresjon (?)

UngDemens i Trøndelag

- 410 pasienter identifisert totalt
- 390 pasienter inkludert i etiologi-studien
- 171 pasienter inkludert i prevalens-studien
- 89 pasienter inkludert i insidens-studien
- 223 pasienter inkludert i «Time to diagnosis in young onset AD»

Table 1 Sources of identification

Source	n (%)
<i>Primary</i>	<i>248 (63.6)</i>
Databases of:	
Dept. of Neurology	161 (41.3)
Dept. of Psychiatry	96 (24.6)
Both	9 (2.3)
<i>Secondary</i>	<i>142 (36.4)</i>
Hospital records	61 (15.6)
SOSII*	13 (3.4)
Other departments	7 (1.8)
Community research**	61 (15.6)

*Specialized outpatient services for individuals with intellectual disabilities

**12 patients were identified through the regional center for HD

Utredning

Table 2 Medical evaluation of consenting patients

		Cognitive tests					Biomarkers			
		Interview with caregiver*	MMSE	Clock drawing test	TMT-A and/ or –B	CERAD	CSF analysis	MRI	Both CSF&MRI	DATscan
All	n	279	278	265	224	156	212	278	207	17
	%	92.7	92.4	88.0	74.4	51.8	70.4	92.4	68.8	5.6
AD	n	195	203	198	172	118	170	195	165	2
	%	95.1	99.0	96.6	83.9	57.6	82.9	95.1	80.5	1.0
FTD	n	26	24	24	19	16	21	26	21	0
	%	100.0	92.3	92.3	73.1	61.5	80.8	100.0	80.8	0.0
DLB /PDD	n	18	21	19	16	13	11	18	11	13
	%	85.7	100.0	90.5	76.2	61.9	52.4	85.7	52.4	61.9
VaD	n	10	6	3	11	1	0	7	0	0
	%	90.9	54.5	27.3	100.0	9.1	0.0	63.6	0.0	0.0

n (All) = 301

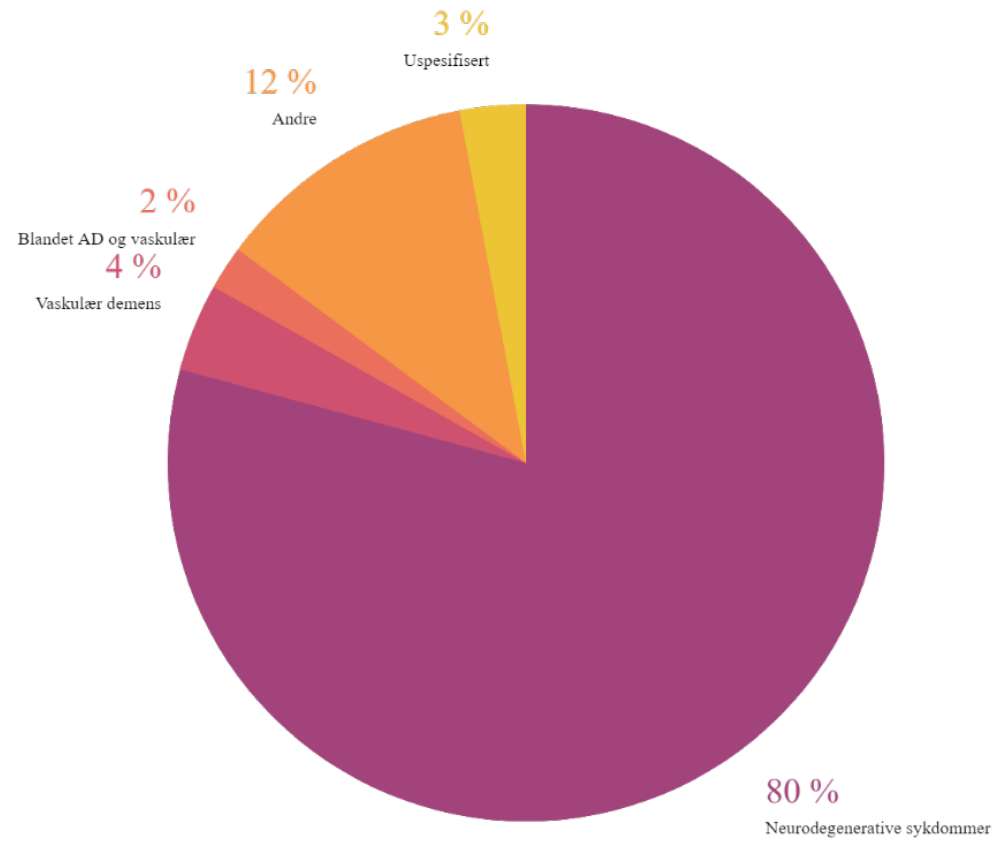
n (AD) = 205

n (FTD) = 26

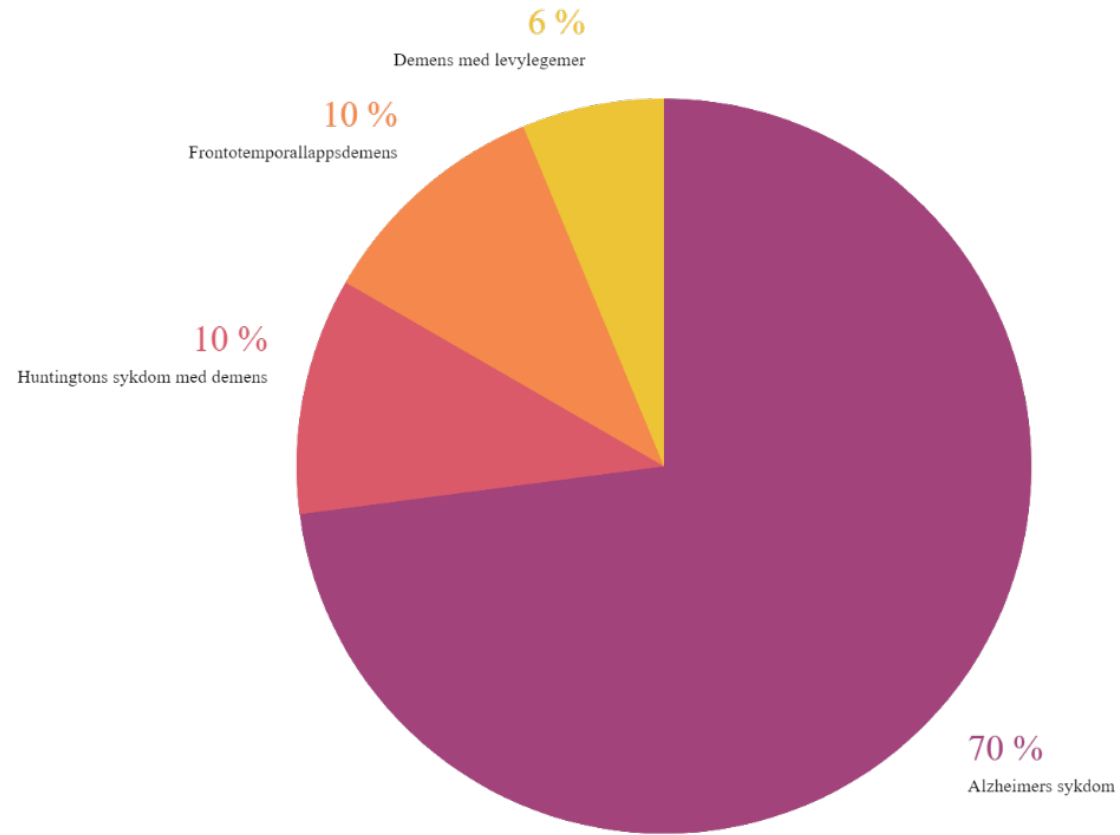
n (LBD/ PDD) = 21

n (VaD) = 11

UngDemens i Trøndelag (n = 390)

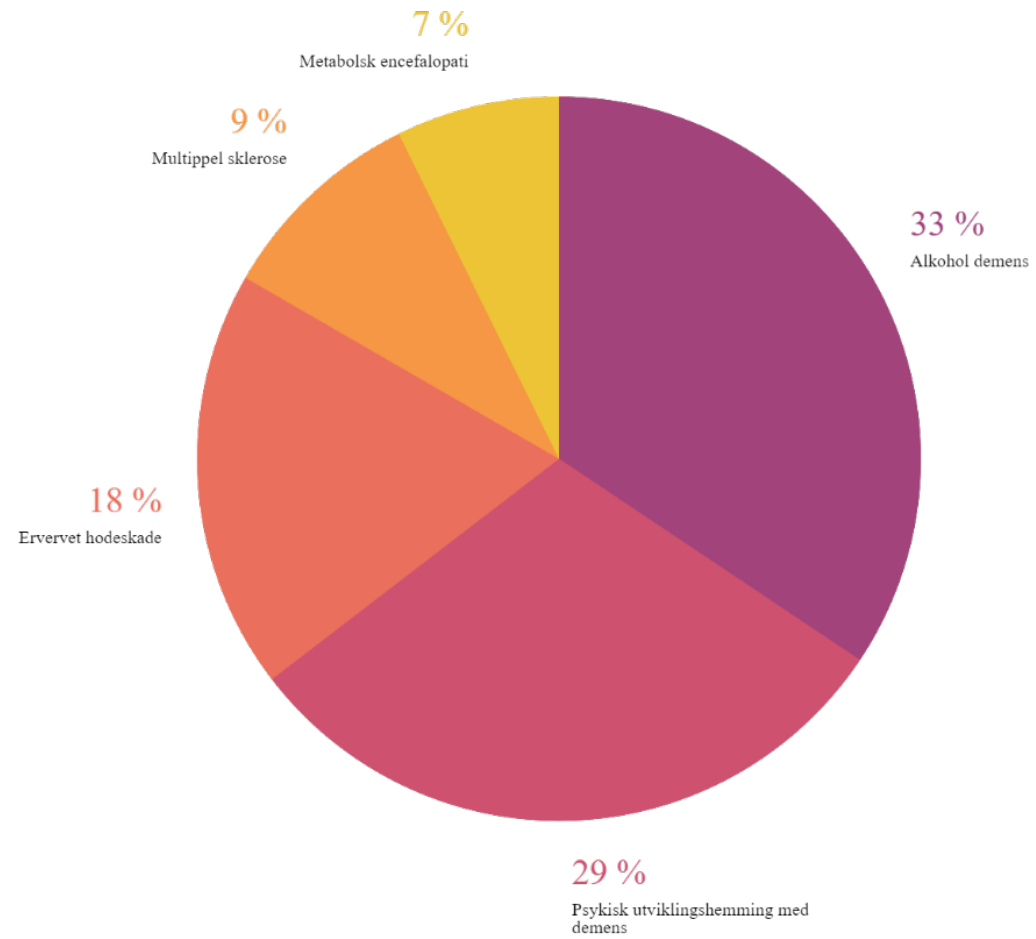


Nevrodegenerative sykdommer (n = 311)



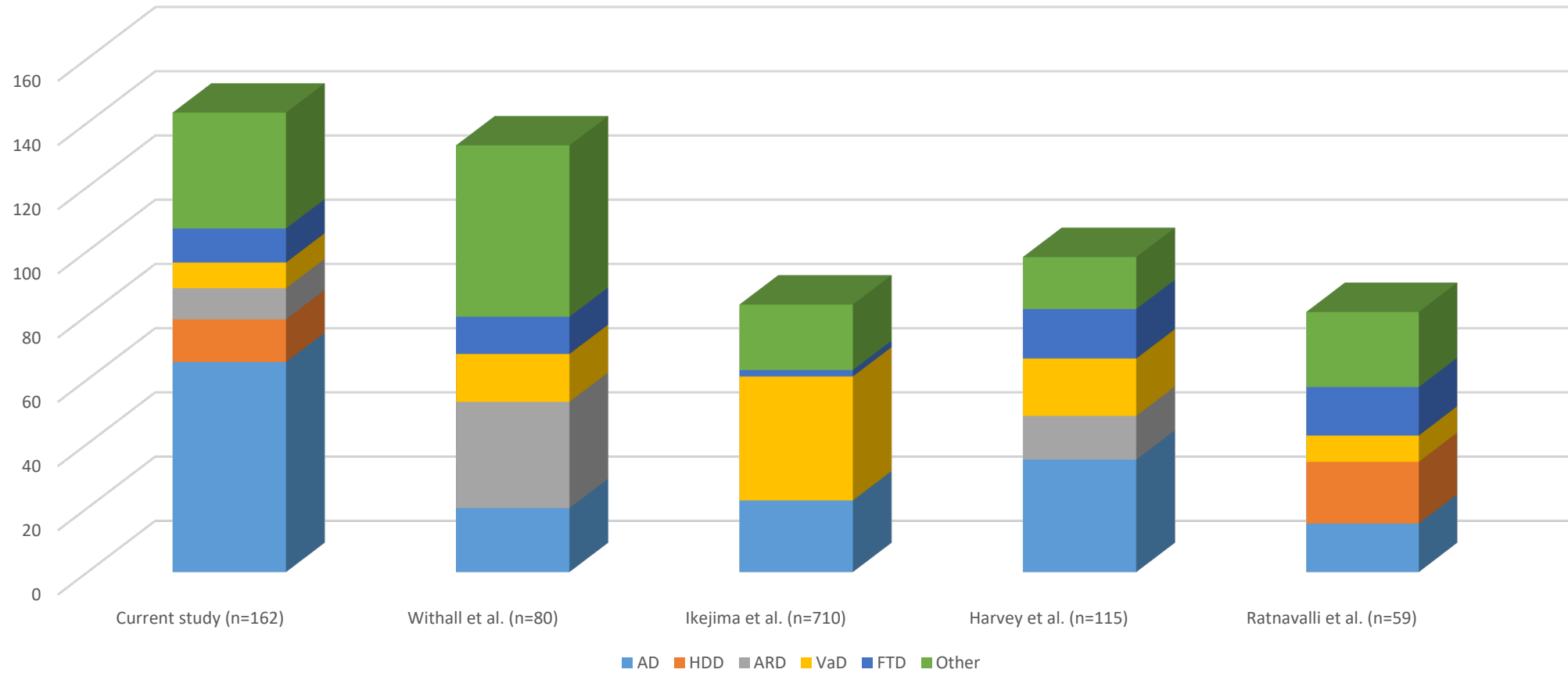
PCA 5
PSP 1
CBD 1

Andre (n = 45)



NPH 1
Encefalitt 1

45 – 64 år

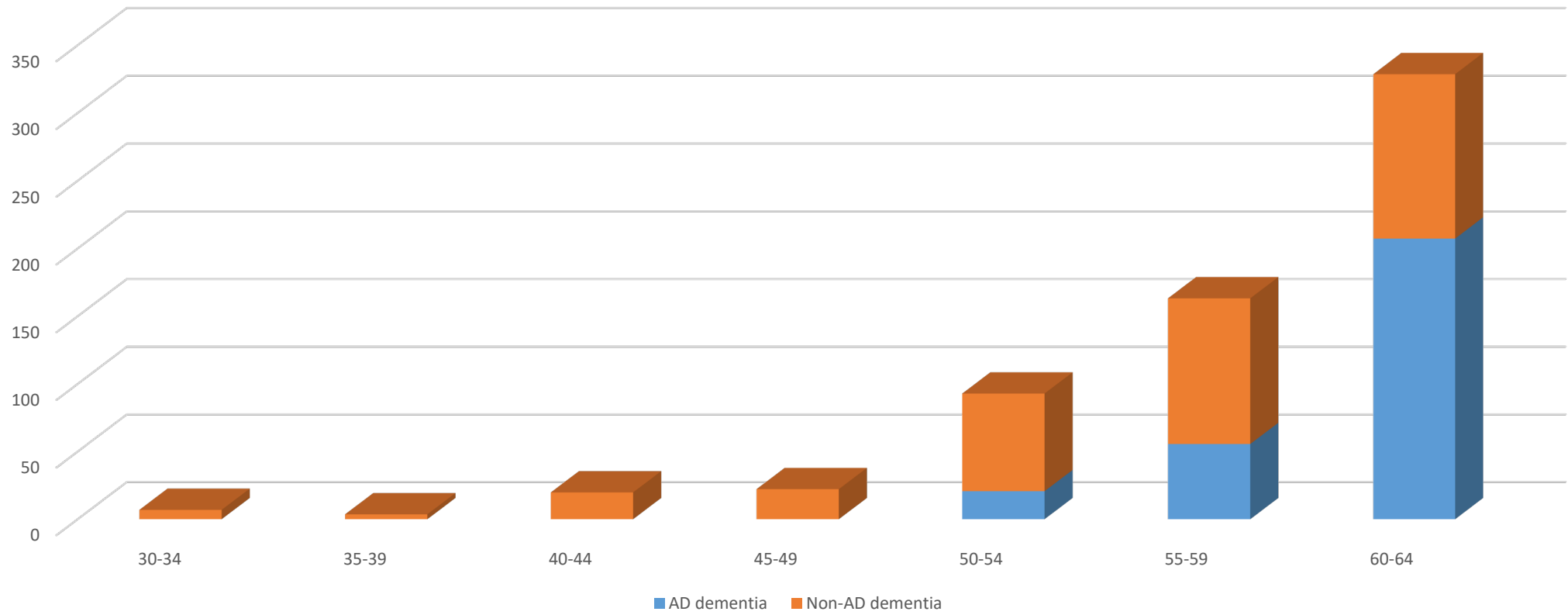


Prevalens

Population		All causes of dementia									
		All			Male			Female			
Age range	Male (n)	Female (n)	n	Rate*	95% CI	n	Rate*	95% CI	n	Rate*	95% CI
30-34	14 955	13 956	2	6.9	(1.0-25.0)	2	13.4	(1.6-48.3)	0	-	-
35-39	14 451	13 145	1	3.6	(1.0-20.2)	0	-	-	1	7.6	(1.0-42.4)
40-44	15 656	14 683	6	19.8	(7.3-43.0)	5	31.9	(10.4-74.5)	1	6.8	(1.0-38.0)
45-49	16 094	15 507	7	22.2	(8.9-45.6)	5	31.1	(10.1-72.5)	2	12.9	(1.6-46.6)
50-54	14 908	14 146	27	92.9	(61.3-135.2)	11	73.8	(36.8-132.0)	16	113.1	(64.7-183.6)
55-59	13 762	13 199	44	163.2	(118.6-219.0)	21	152.6	(94.5-233.2)	23	174.3	(110.5-261.4)
60-64	12 830	12 732	84	328.6	(262.2-406.7)	42	327.4	(236.0-442.2)	42	329.9	(237.8-445.6)
30-44	45 062	41 784	9	10.4	(4.7-19.7)	7	15.5	(6.2-32.0)	2	4.8	(1.0-17.3)
30-64	102 656	97 368	171	85.5	(73.2-99.3)	86	83.8	(67.0-103.5)	85	87.3	(69.7-107.9)
45-64	57 594	55 584	162	143.1	(122.0-167.0)	79	137.2	(108.6-171.0)	83	149.3	(119.0-185.1)

*Rate per 100 000 people at risk

Alzheimer's dementia vs non-Alzheimer's dementia in central Norway (n=171).



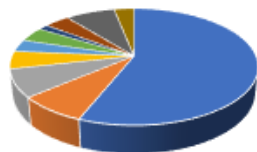
Chiari et al. 2021 DSM-V

Clinical diagnosis	N	%	M/F
Total	258	100	123/135
AD	113	43.8	36/77
FTD spectrum	78	30.2	44/34
Vascular dementia	24	9.3	16/8
Lewy body dementia	9	3.5	5/4
Leukoencephalopathy	7	2.7	5/2
Parkinson disease dementia	7	2.7	6/1
Alcoholic dementia	4	1.5	3/1
Cerebral amyloid angiopathy	3	1.2	2/1
Dementia in Huntington disease	3	1.2	2/1
NOS	10	3.9	4/6

Clinical subtypes	Prevalent clinical subtypes N (%)	Prevalence on June 30, 2019	Incident clinical subtypes N (%)	Incidence (January 1, 2016-June 30, 2019)
AD	113 (100)	32.6	61 (100)	5.0
Amnestic	77 (68.1)	22.2	45 (73.8)	3.7
Posterior cortical atrophy (PCA)	8 (7.1)	2.3	2 (3.3)	0.16
Logopenic variant (lvPPA)	20 (17.8)	5.8	10 (16.4)	0.8
Behavioral/dysexecutive	4 (3.5)	1.2	/	/
NOS	4 (3.5)	1.2	4 (6.5)	0.3
FTD SPECTRUM	78 (100)	22.5	52 (100)	4.3
Behavioral variant (bvFTD)	49 (62.8)	14.1	32 (61.5)	2.6
Semantic variant (svPPA)	11 (14.1)	3.2	9 (17.3)	0.74
Non-fluent primary progressive aphasia (nfvPPA)	2 (2.6)	0.6	2 (3.8)	0.16
FTD-ALS	6 ^a (7.7)	1.7	4 ^b (7.7)	0.32
Corticobasal syndrome (CBS)	5 (6.4)	1.4	2 (3.8)	0.16
Progressive supranuclear palsy (PSP)	4 (5.1)	1.2	3 (5.9)	0.25
NOS	1 (1.3)	0.3	/	/

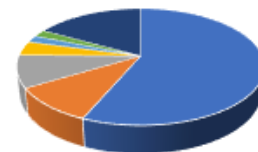
Trøndelag

Young onset dementia*



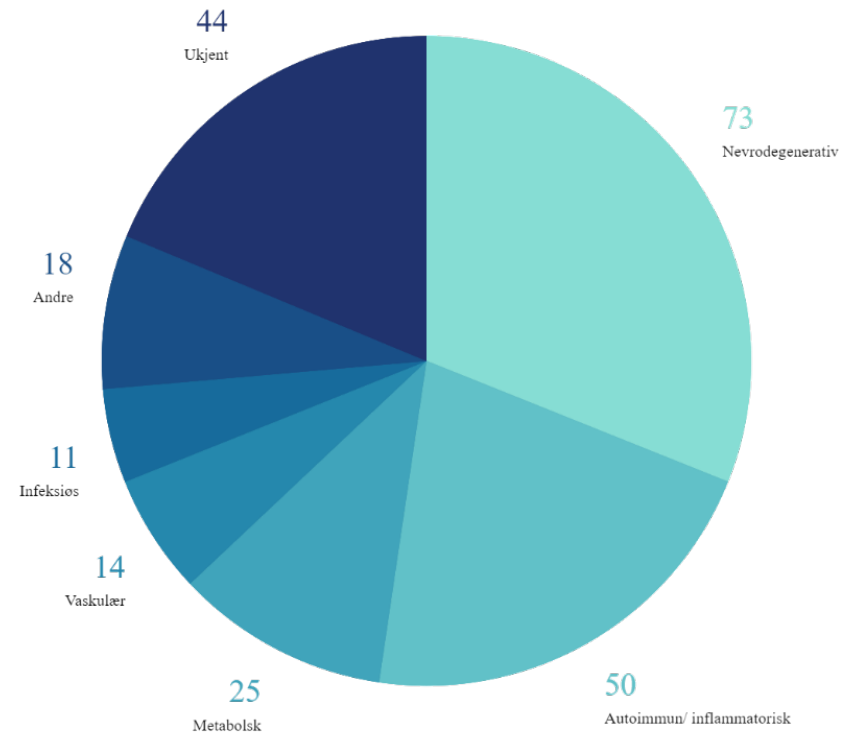
- Alzheimer's disease
- Huntington's's dementia
- Frontotemporal dementia
- Lewy Body dementia
- Other degenerative dementias
- Vascular dementia

Late onset dementia**



- Alzheimer's disease
- Vascular dementia
- Mixed dementia
- Lewy Body dementia
- Frontotemporal dementia
- Others

Etiologi < 45 år (n = 245) (Kelley et al.)



Insidens

Table 2. Age- and gender-specific incidence rates of dementia 2015-2017.

Age range	Denominators (person-years)		All			Male			Female		
	Male	Female	n	Rate*	95% CI	n	Rate*	95% CI	n	Rate*	95% CI
30-34	45 208	41 870	0	0.0	0.0-4.2**	0	0.0	0.0-8.2**	0	0.0	0.0-8.8**
35-39	43 328	39 666	2	2.4	0.3-8.7	1	2.3	0.1-12.9	1	2.5	0.1-14.1
40-44	46 767	43 948	2	2.2	0.3-8.0	0	0.0	0.0-7.9**	2	4.6	0.6-16.4
45-49	48 399	46 461	2	2.1	0.3-7.6	0	0.0	0.0-7.6**	2	4.3	0.5-15.6
50-54	44 655	42 448	18	20.7	12.3-32.7	10	22.4	10.7-41.2	8	18.9	8.1-37.1
55-59	41 357	39 621	23	28.4	18.0-42.6	8	19.3	8.4-38.1	15	37.9	21.2-62.4
60-64	38 414	38 200	42	54.8	39.5-74.1	22	57.3	35.9-86.7	20	52.4	32.0-80.9
30-64	308 128	292 214	89	14.8	11.9-18.2	41	13.3	9.6-18.1	48	16.4	12.1-21.8
45-64	172 825	166 730	85	25.0	20.0-31.0	40	23.1	16.5-31.5	45	27.0	19.7-36.1

*Rate per 100 000 person-years

**One-sided, 97.5% CI

Table 4. Incidence rates per 100 000 person years of all dementia and Alzheimer's disease in various studies.

ALL DEMENTIA					
	<i>Current study</i>	<i>Garre-Olmo et al.</i>	<i>Mercy et al.</i>	<i>Edland et al.</i>	<i>Ruitenber et al.</i>
	<i>Norway</i>	<i>Spain</i>	<i>United Kingdom</i>	<i>USA</i>	<i>Netherland</i>
	<i>(2019)</i>	<i>(2010)</i>	<i>(2008)</i>	<i>(2002)</i>	<i>(2001)</i>
30-34	0.0	0.5	-	-	-
35-39	2.4	1.1	-	-	-
40-44	2.2	2.9	-	-	-
45-49	2.1	5.1	-	-	-
50-54	20.7	14.8	-	35.6	-
55-59	28.4	32.0	-	40.2	40.0*
60-64	54.8	67.7	-	129.2	50.0*
30-64	14.8	13.4	-	-	-
45-64	25.0	22.8	11.5	-	-
<i>N</i>	89	144	54	24	5

Table 3. Age- and gender-specific incidence rates of Alzheimer's disease 2015-2017.

Age-range	All			Male			Female		
	N	Rate*	95 % CI	N	Rate*	95 % CI	N	Rate*	95 % CI
50-54	6	6.9	2.5-15.0	4	9.0	2.4-22.9	2	4.7	0.6-17.0
55-59	10	12.4	5.9-22.7	2	4.8	0.6-17.5	8	20.2	8.7-39.8
60-64	24	31.3	20.1-46.6	10	26.0	12.5-47.9	14	36.7	20.0-61.5
30-64	40	6.7	4.8-9.1	16	5.2	3.0-8.4	24	8.2	5.3-12.2
45-64	40	11.8	8.4-16.0	16	9.3	5.3-15.0	24	14.4	9.2-21.4
50-64	40	16.4	11.7-22.3	16	12.9	7.4-20.9	24	20.0	12.8-29.7

*Rate per 100 000 person-years

ALZHEIMER'S DISEASE

	<i>Current study</i>	<i>Garre-Olmo et al.</i>	<i>Mercy et al.</i>	<i>Edland et al.</i>	<i>Ruitenberg et al.</i>	<i>Newens et al.</i>
	<i>Norway</i>	<i>Spain</i>	<i>United Kingdom</i>	<i>USA</i>	<i>Netherland</i>	<i>United Kingdom</i>
	<i>(2019)</i>	<i>(2010)</i>	<i>(2008)</i>	<i>(2002)</i>	<i>(2001)</i>	<i>(1993)</i>
50-54	6.7	-	-	21.3	-	4.9
55-59	12.4	-	-	16.1	0.0*	8.1
60-64	31.3	-	-	36.9	10.0*	14.5
30-64	6.7	5.7	-	-	-	-
45-64	11.8	11.9	4.2	-	-	7.2
<i>N</i>	<i>40</i>	<i>61</i>	<i>19</i>	<i>9</i>	<i>-</i>	<i>94</i>

*Calculated from 1000 person-years

Time to diagnosis - aspekter

- Lang tid før diagnose settes
- Flere konsultasjoner
- Flere avdelinger involvert
- Depresjon
- Diagnostisk heterogenitet
- Annen klinisk presentasjon
- «Time to diagnosis in typical young onset AD» (til publikasjon)
 - Tid fra symptom til kontakt med helsevesenet
 - Tid fra kontakt med helsevesenet til utredning
 - Tid fra utredning til diagnose
 - Kognitive tester (hvilke?)
 - Billeddiagnostikk
 - Analyse av demensmarkører
 - Diagnosekriterier

- Takk for meg!