

# Sjukdomsbördan vid migrän

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Svenska Neurologiveckan  
Malmö 17 maj 2019



| DN Debatt

*DN Debatt. ”Svenska  
huvudvärkspatienter nekas  
modern effektiv vård”*

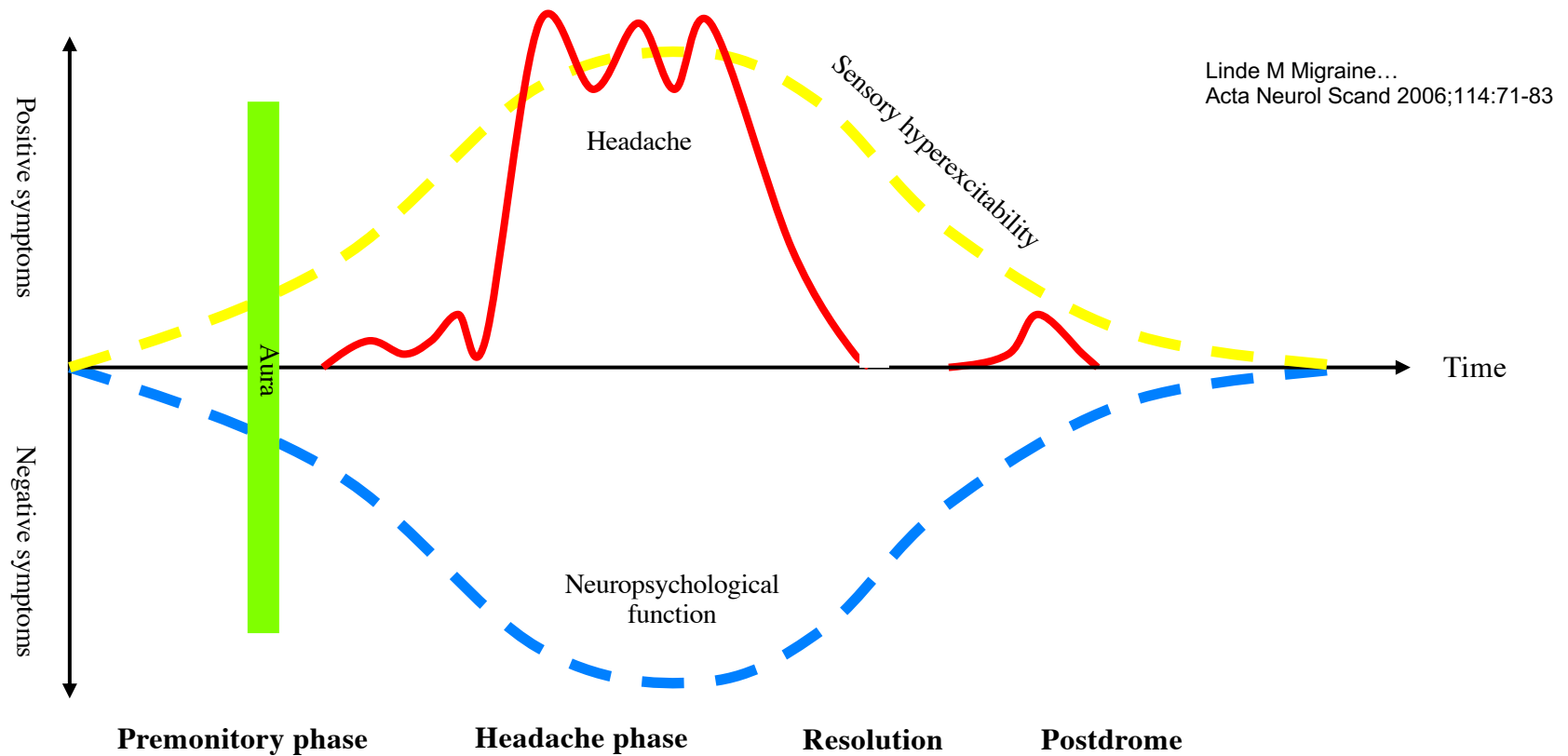


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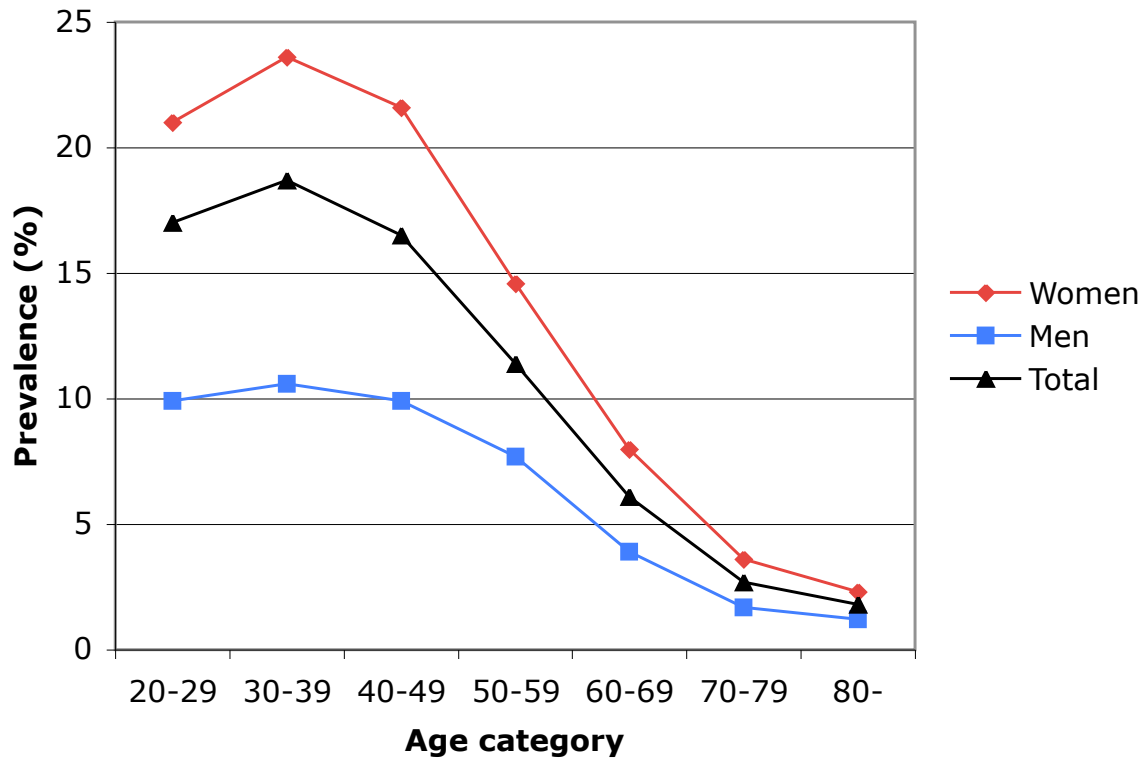


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# Migränanfallets dynamik

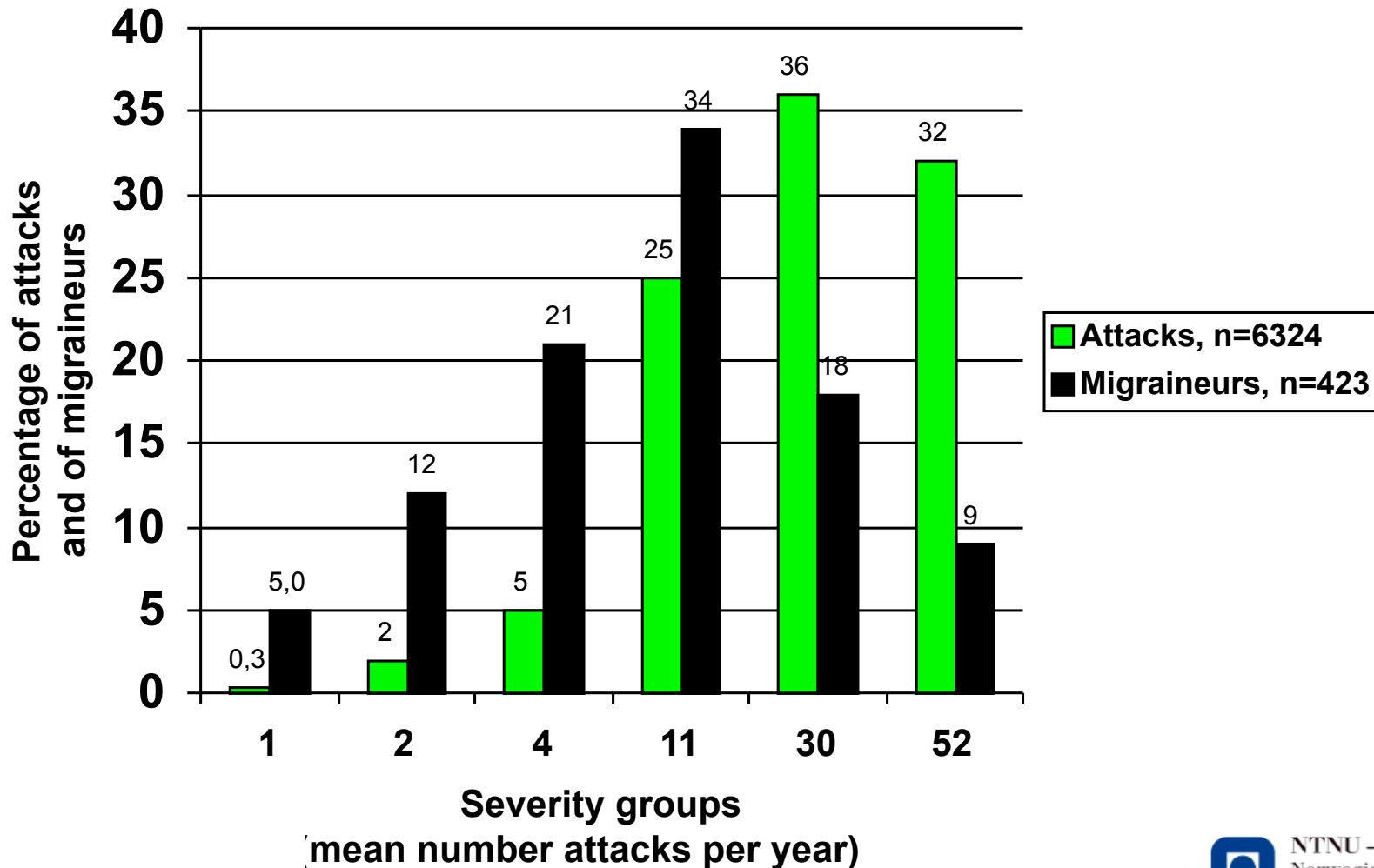


# Migraine demographics – sex and age



Linde M, Stovner LJ, Zwart JA, and Hagen K "Time trends in the prevalence of headache disorders. The Nord-Trøndelag Health Studies (HUNT 2 and 3). Cephalalgia 2011 Apr;31(5):585-96

# Migraine severity varies



Linde M and Dahlföf C Attitudes and burden of disease among self-considered migraineurs. A nation-wide, population-based survey in Sweden Cephalalgia 2004;24:455-65

# Global, regional, and national burden of neurological disorders during 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015



GBD 2015 Neurological Disorders Collaborator Group\*

**Findings** Neurological disorders ranked as the leading cause group of DALYs in 2015 (250·7 [95% uncertainty interval (UI) 229·1 to 274·7] million, comprising 10·2% of global DALYs) and the second-leading cause group of deaths (9·4 [9·1 to 9·7] million), comprising 16·8% of global deaths). The most prevalent neurological disorders were tension-type headache (1505·9 [UI 1337·3 to 1681·6 million cases]), migraine (958·8 [872·1 to 1055·6] million), medication overuse headache (58·5 [50·8 to 67·4 million]), and Alzheimer's disease and other dementias (46·0



*Lancet Neurol* 2017; 16: 877–97

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See [Comment](#) page 858

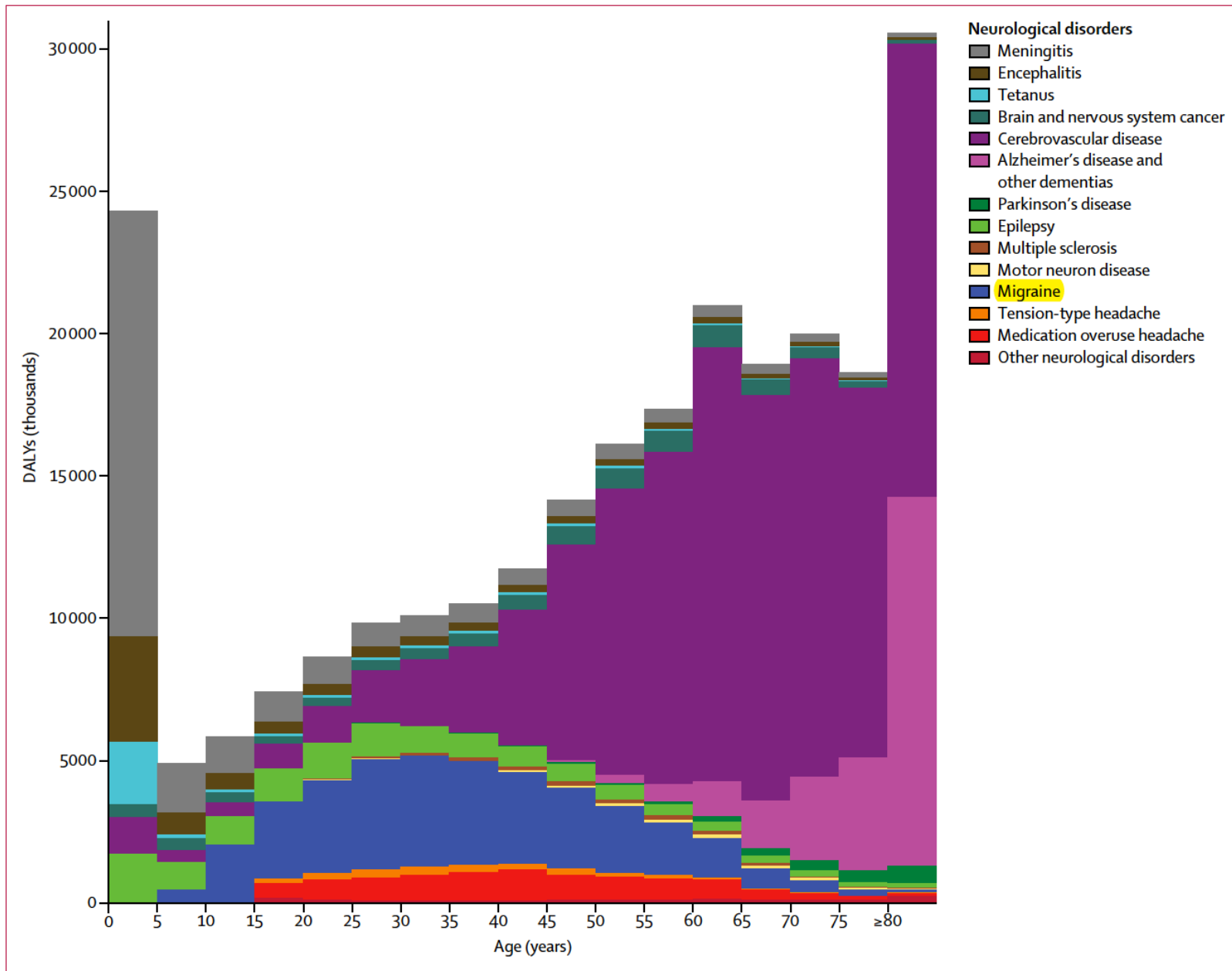



Figure 1: Global DALYs by age and neurological disorder in 2015  
 DALYs=disability-adjusted life-years.

	Rank																													
	1-2	3-4	5-6	7-8	9-10	11-12	13-14	Global	East Asia	Southeast Asia	Oceania	Central Asia	Central Europe	Eastern Europe	High-income Asia Pacific	Australasia	Western Europe	Southern Latin America	High-income North America	Caribbean	Andean Latin America	Central Latin America	Tropical Latin America	North Africa and Middle East	South Asia	Central sub-Saharan Africa	Eastern sub-Saharan Africa	Southern sub-Saharan Africa	Western sub-Saharan Africa	
Stroke	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1
Migraine	2	3	2	4	2	2	2	2	2	1	1	2	3	2	2	3	2	3	2	3	2	3	2	3	2	4	4	3	3	
Alzheimer's disease and other dementias	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	3	3	2	3	2	4	3	5	5	4	
Meningitis	4	7	4	2	7	11	7	11	12	12	7	12	4	7	7	7	5	3	2	2	4	2	5	3	2	2	2	4	2	
Epilepsy	5	5	5	5	4	6	6	5	6	6	5	6	5	6	5	6	6	5	6	5	5	4	6	4	6	5	3	2	5	
Medication overuse headache	6	6	8	7	6	5	4	4	5	4	4	4	6	4	5	5	6	4	5	5	6	7	6	7	6	7	6	6		
Encephalitis	7	8	6	6	8	12	8	12	13	13	11	13	10	8	9	12	8	5	9	8	9	12	8	5	9	8	9	8		
Brain and nervous system cancer	8	4	7	8	5	4	5	6	4	5	6	5	7	6	6	4	7	6	6	4	7	9	7	9	8	9	7	7		
Tetanus	9	14	10	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	12	14	14	14	12	8	7	6	14	9
Other neurological disorders	10	10	11	9	9	7	9	7	9	8	9	9	9	11	8	9	8	9	9	9	11	8	8	10	11	10	10	8	10	
Parkinson's disease	11	11	12	10	11	9	12	8	7	7	8	8	8	10	11	9	11	10	11	11	10	11	9	11	12	11	12	10	11	
Tension-type headache	12	9	9	11	10	10	10	9	11	11	10	11	11	9	10	10	10	10	11	11	11	10	10	9	10	12	11	11	12	
Multiple sclerosis	13	13	14	13	12	8	11	13	10	9	13	7	13	13	12	13	13	13	13	13	13	12	13	13	13	13	13	12	13	
Motor neuron disease	14	12	13	12	13	13	13	10	8	10	12	10	14	12	10	14	12	10	14	12	13	11	14	14	14	14	14	13	14	

Figure 4: Ranking of age-standardised DALY rates for all neurological disorders by GBD region in 2015

Data are for both sexes. DALYs=disability-adjusted life-years.

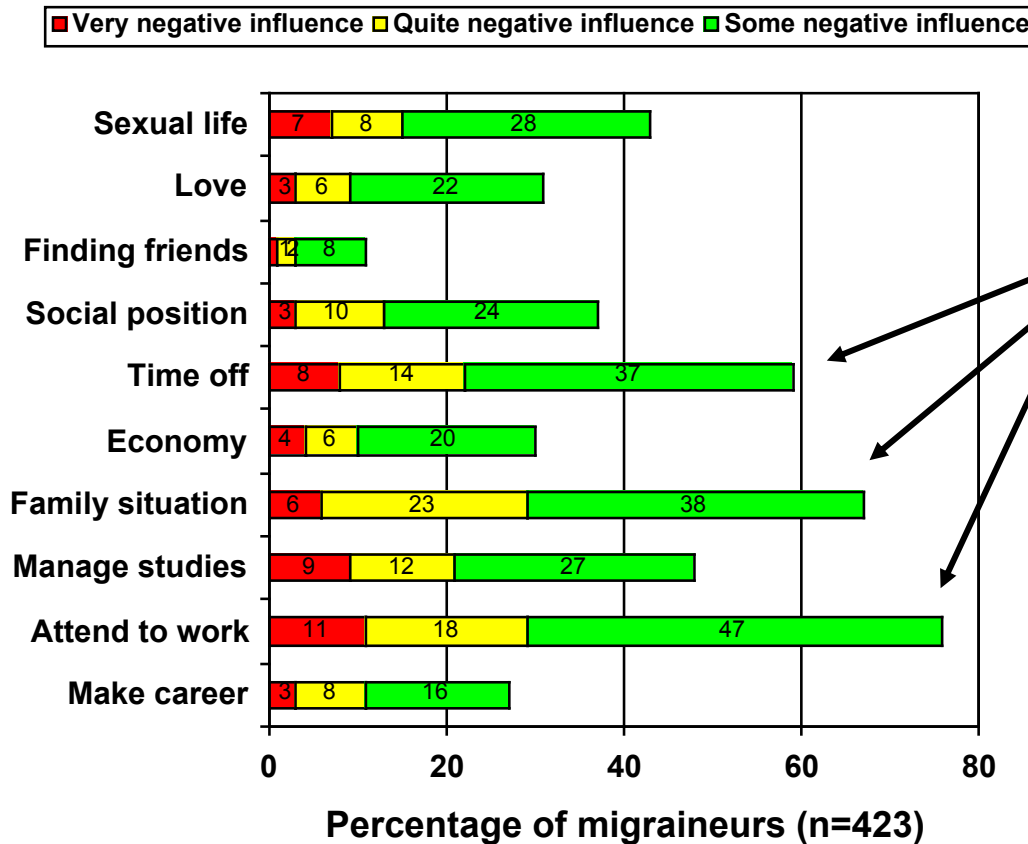


2	A	B	C	D	E	F	G	FF	FG	FH	
1	 <b>World Health Organization</b> Department of Information, Evidence and Res December 2016  <b>Estimated DALYs ('000) by cause, sex            and WHO Member State (1), 2015</b>										
7	Sex	GHE code	GHE cause	Member State (See Notes for explanation of colour codes)				Suriname	Swaziland	Sweden	Switz
8	ISO-3 Code							SUR	SWZ	SWE	C
137	Persons	920		10.	T			0.5	1.0	3.0	
138	Persons	930		11.	Other mental and behaviou			0.7	1.3	14.5	
139	Persons	940	F.	Neurological conditions			6.2	12.4	215.9		
140	Persons	950		1.	Alzheimer disease and othe			1.9	1.1	129.5	
141	Persons	960		2.	Parkinson disease			0.1	0.2	11.0	
142	Persons	970		3.	Epilepsy			1.3	6.5	8.1	
143	Persons	980		4.	Multiple sclerosis			0.0	0.1	6.2	
144	Persons	990		5.	Migraine			2.1	3.5	34.8	
145	Persons	1000		6.	Non-migraine headache			0.4	0.5	5.6	
146	Persons	1010		7.	Other neurological conditio			0.4	0.6	20.8	
147	Persons	1020	G.	Sense organ diseases			4.5	6.3	52.1		
148	Persons	1030		1.	Glaucoma			0.2	0.2	1.2	

[http://www.who.int/healthinfo/global\\_burden\\_disease/estimates/en/index2.html](http://www.who.int/healthinfo/global_burden_disease/estimates/en/index2.html). Accessed January 29, 2018.

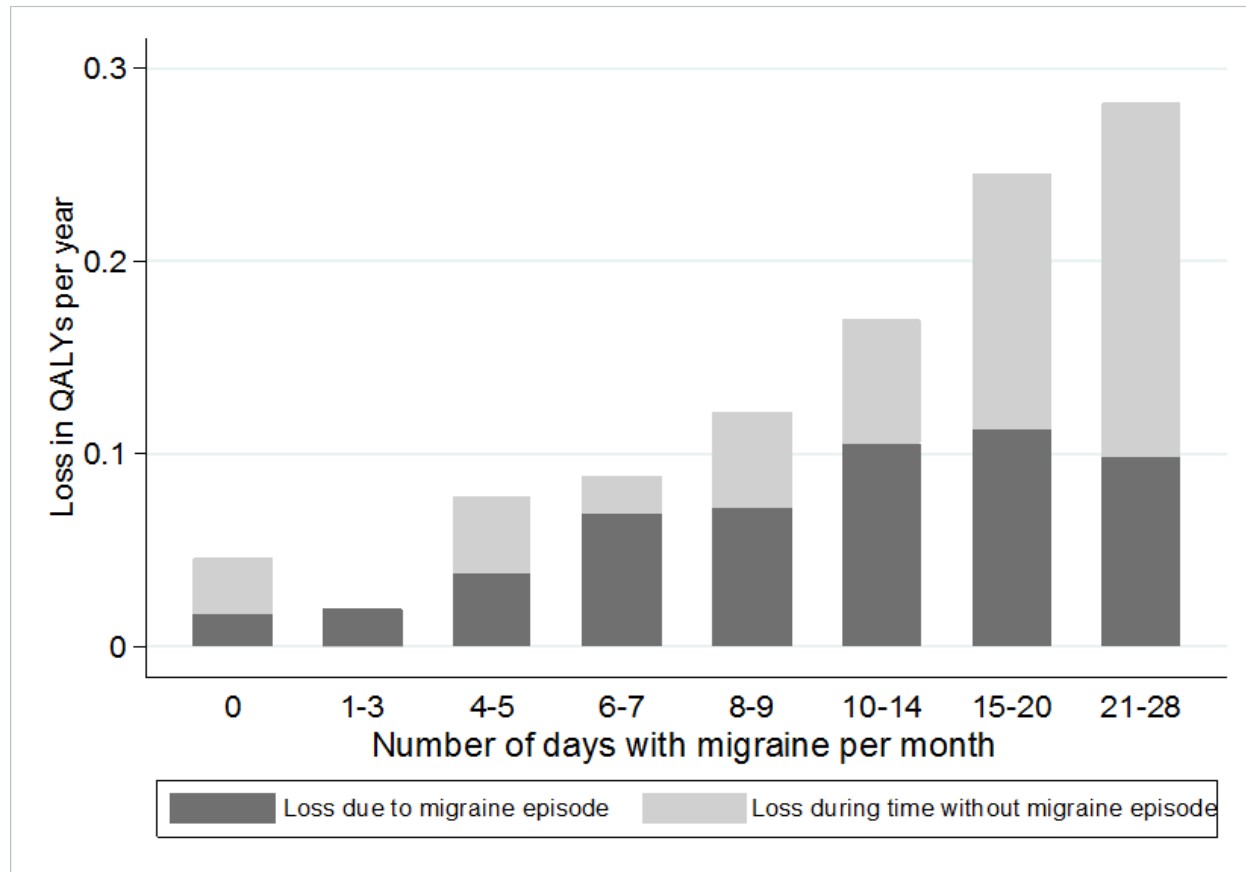
# Konsekvenser i daglig tillvaro

Linde M and Dahlöf C  
Cephalalgia 2004;24:455-65



*Notera hur migrän drabbar centrala faktorer i livet hos dessa individer som valts slumpvis från hela Sverige.*

# QALY loss increases with migraine frequency



$p=0.023$



Hjalte F, Olofsson S, Persson U, Linde M Burden and costs of migraine in a defined Swedish population. J Headache Pain 2019; in press

## The cost of headache disorders in Europe: the Eurolight project

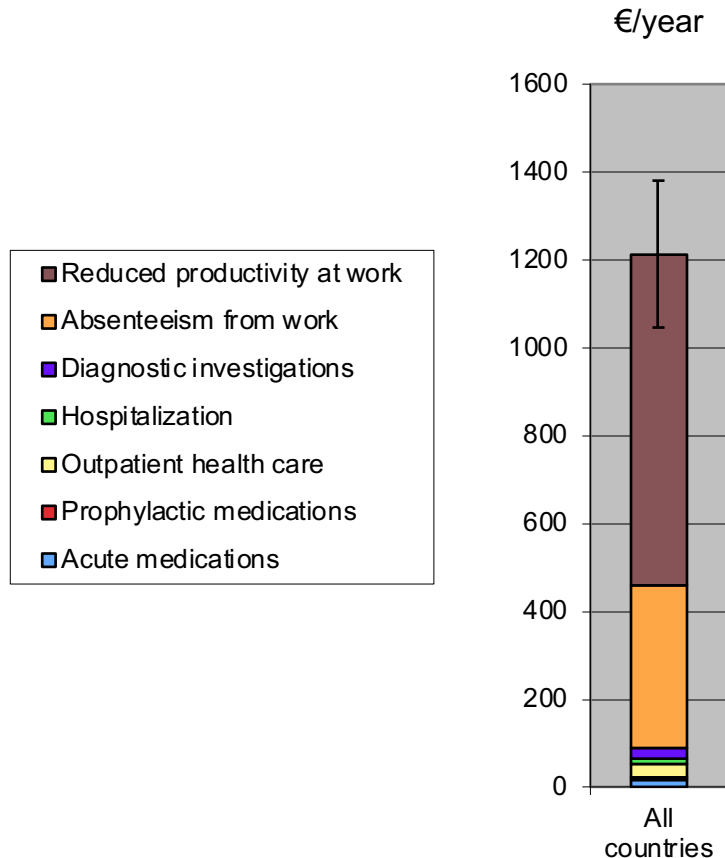
M. Linde<sup>a,b</sup>, A. Gustavsson<sup>c</sup>, L. J. Stovner<sup>a,b</sup>, T. J. Steiner<sup>a,d</sup>, J. Barré<sup>e</sup>, Z. Katsarava<sup>f</sup>, J. M. Lainez<sup>g</sup>, C. Lampl<sup>h</sup>, M. Lantéri-Minet<sup>i</sup>, D. Rastenyte<sup>j</sup>, E. Ruiz de la Torre<sup>k</sup>, C. Tassorelli<sup>l</sup> and C. Andree<sup>d,m</sup>

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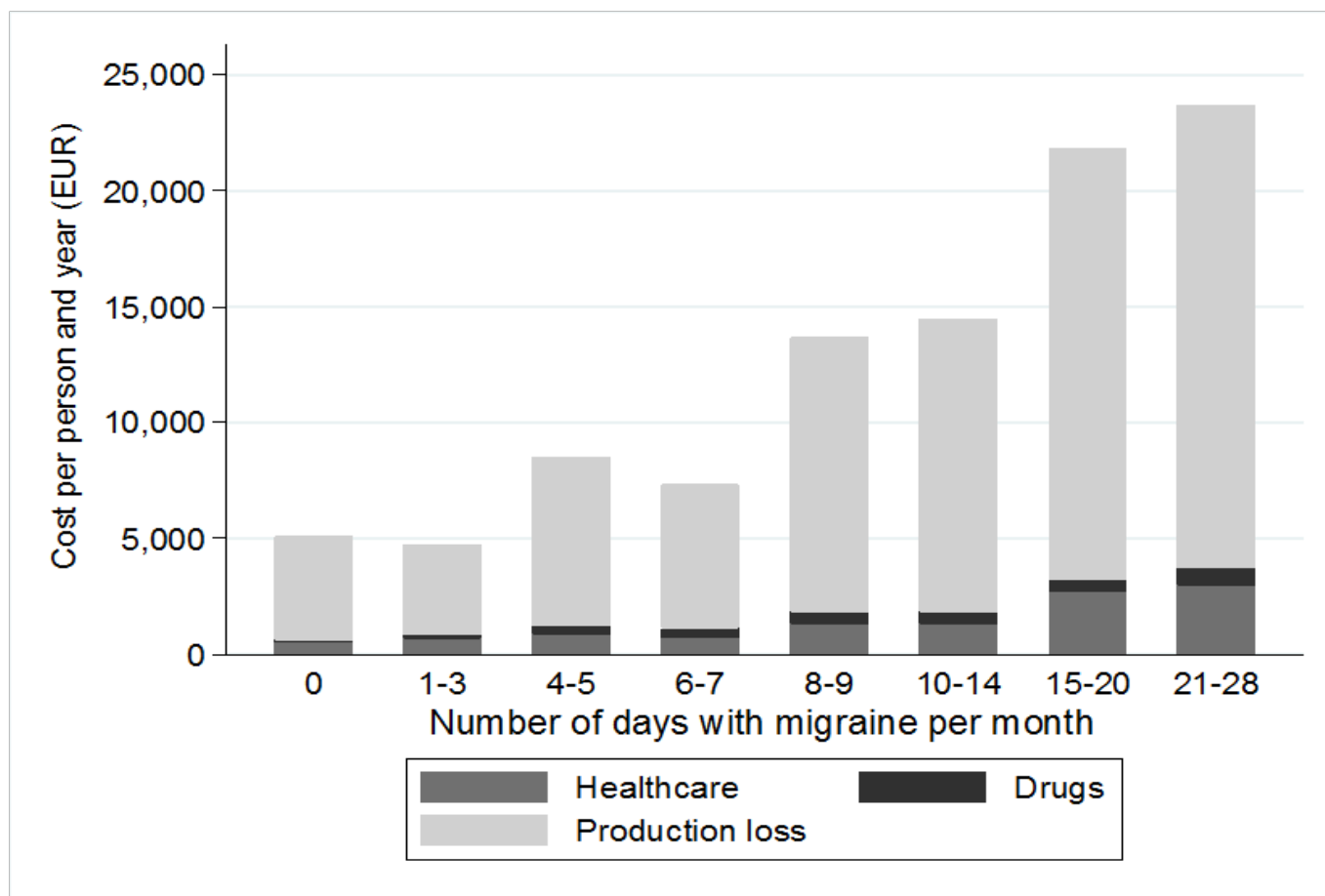
# Mean cost of migraine per sufferer



- Per-person cost: €1 222 / sufferer / year
- 93% indirect costs
- Top contributory category among direct costs: outpatient care (€30)

Linde M, Gustavsson A, Stovner LJ, et al.  
The cost of headache disorders in Europe.  
Eur J Neurol 2012 May;19(5):703-11

# Societal cost increases with migraine frequency

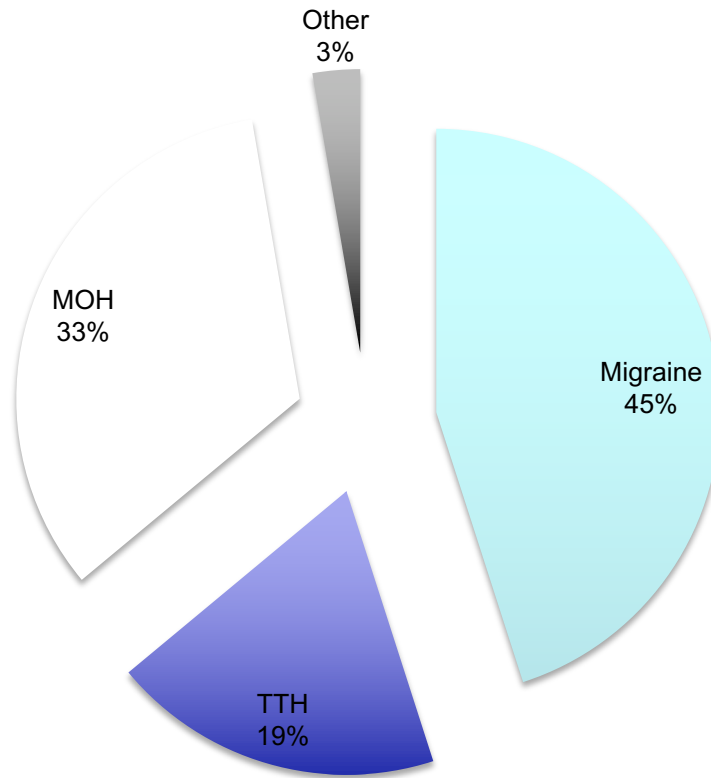


$p < 0.001$



Hjalte F, Olofsson S, Persson U, Linde M Burden and costs of migraine in a defined Swedish population. J Headache Pain 2019; in press

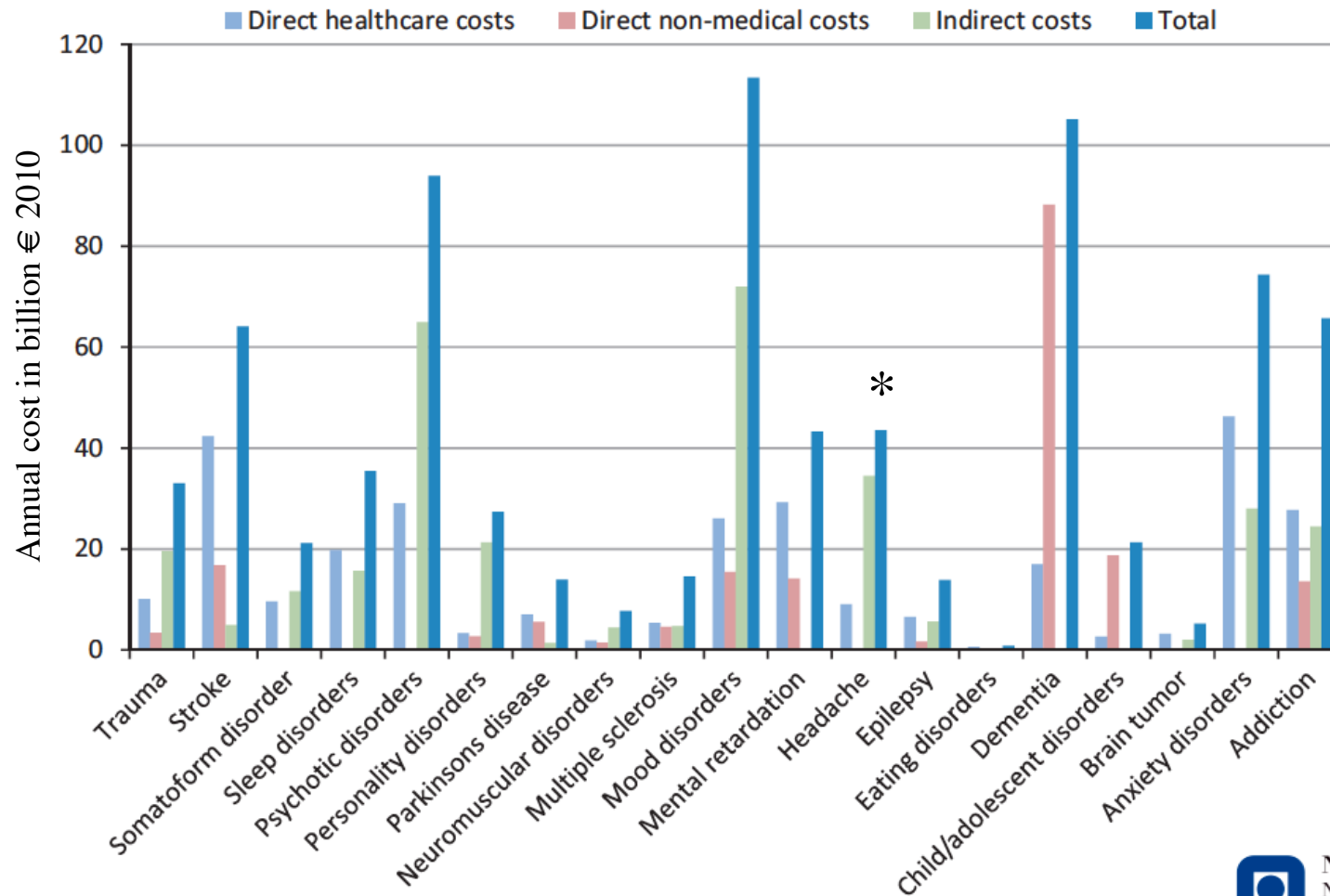
# Total costs (EU27) €112 billion each year



- ① Migraine €50 billion
- ② MOH €37 billion
- ③ TTH €21 billion
- ④ Other €3 billion

Linde M, Gustavsson A, Stovner LJ, et al.  
The cost of headache disorders in Europe.  
Eur J Neurol 2012 May;19(5):703-11

# Context





# Headache service organisation

Level		
3. Headache specialist centres	Advanced, multidisciplinary care Hospital-based	} 1-2 %
2. Special-interest headache care	Physicians with headache interest Outpatient care	
1. General primary care	Primary health care providers Outpatient care	} 90 %

Steiner J *et al* Headache service quality: the role of specialized headache centres within structured headache services. J Headache Pain (2019) 20:24

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