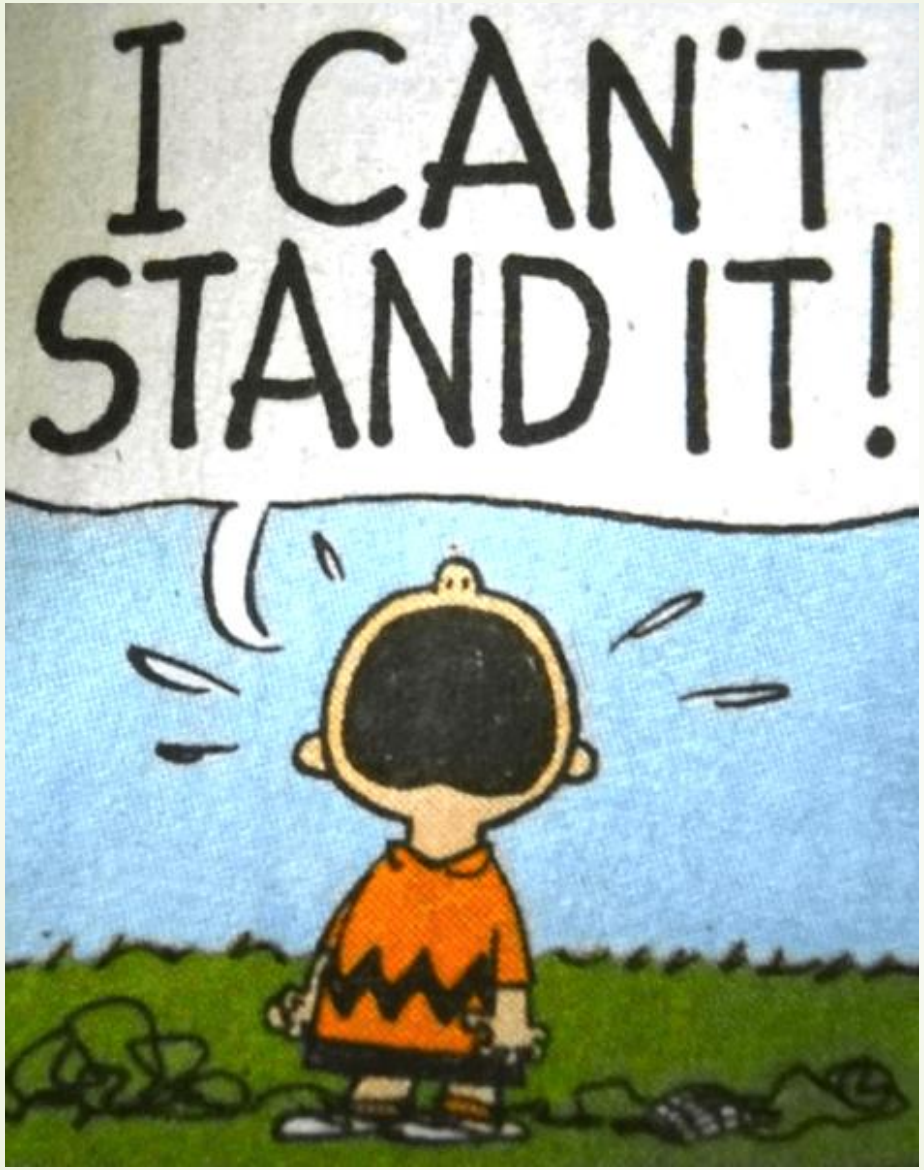
Preventie van chronificatie van pijn

Dr. Astrid Van Lantschoot
Anesthesie- MPC Lanaken
Modulaire opleiding 2022


I CAN'T
STAND IT!

Is er een probleem?

- Elke chronische pijn was ooit acuut
- Prevalentie

Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016

THE LANCET Volume 390, Issue 10100, 16–22 September 2017, Pages 1211-1259

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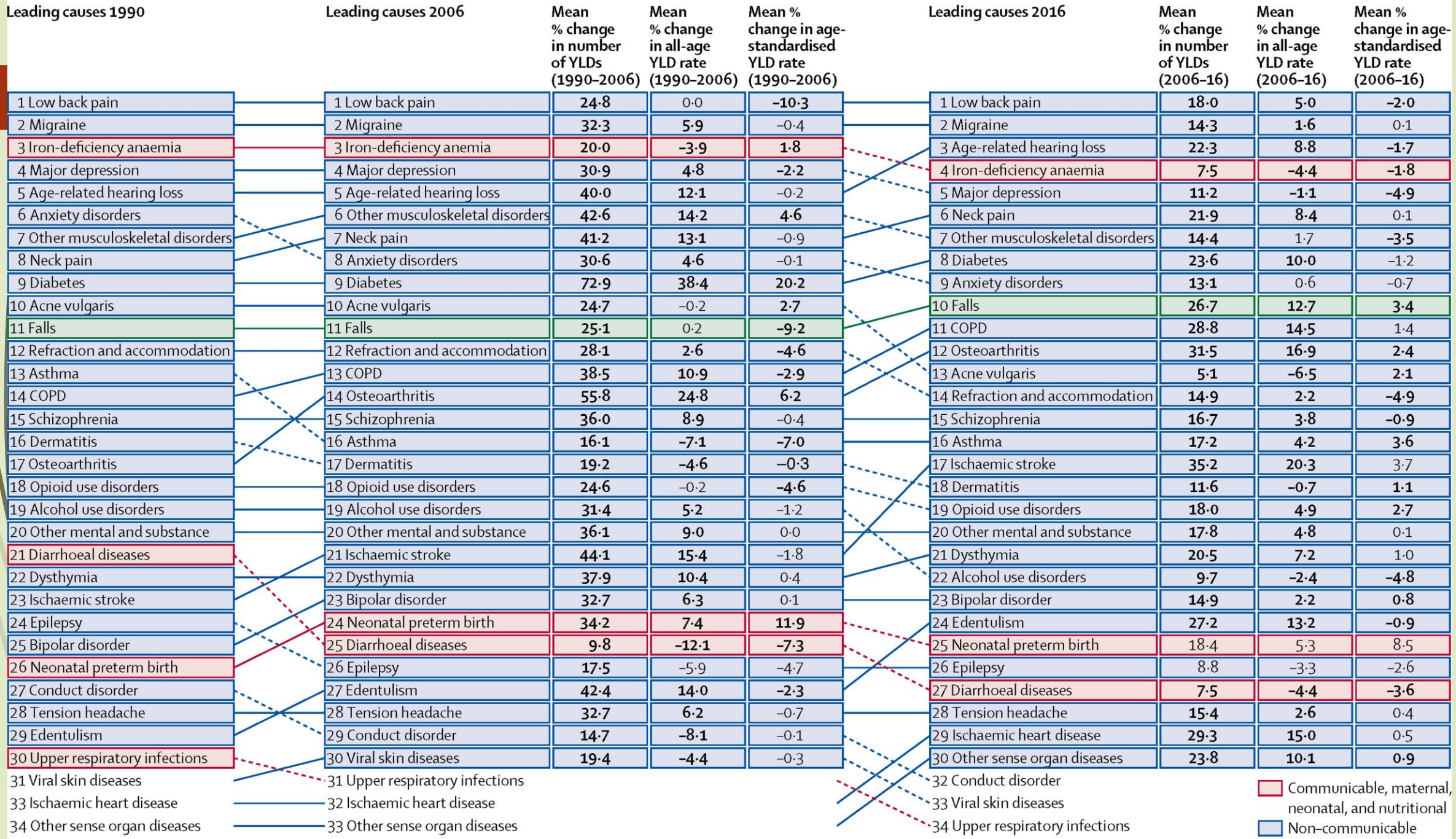
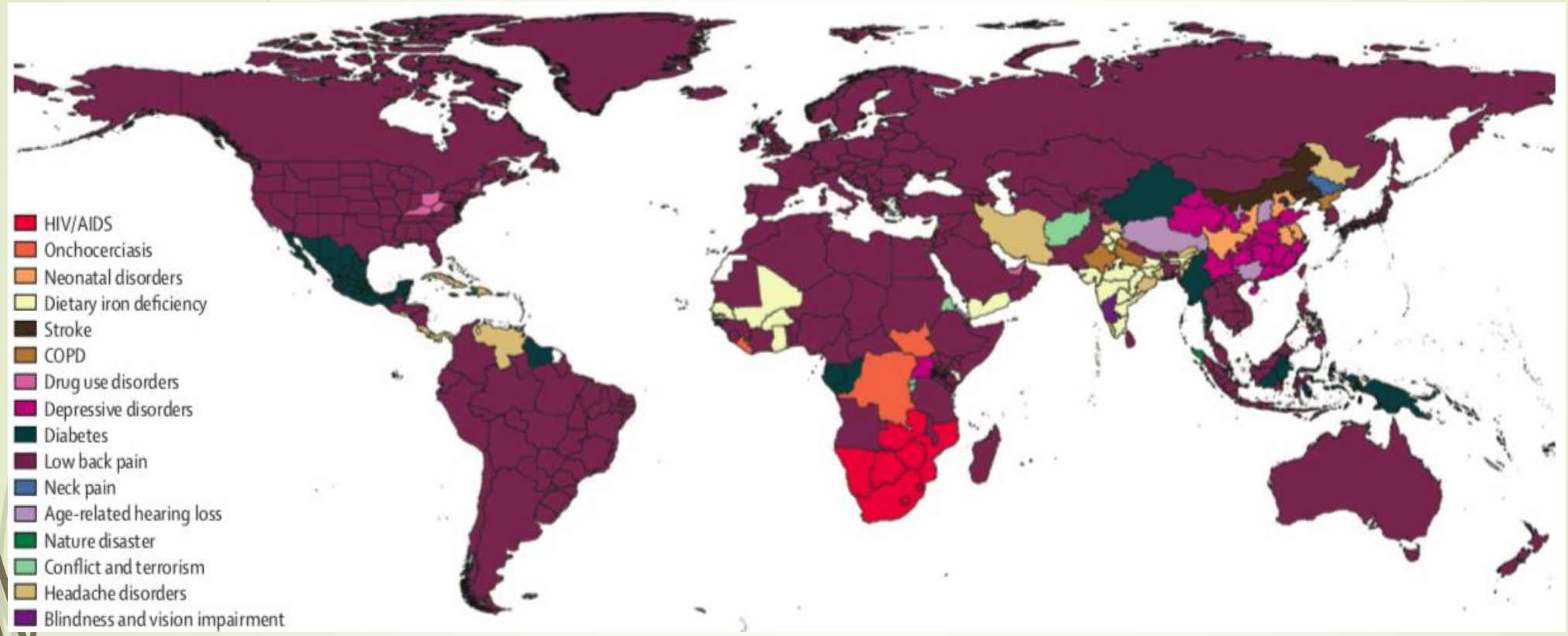

Leading causes 1990
Leading causes 2006
Mean % change in number of YLDs (1990–2006)
Mean % change in all-age YLD rate (1990–2006)
Mean % change in age-standardised YLD rate (1990–2006)
Leading causes 2016
Mean % change in number of YLDs (2006–16)
Mean % change in all-age YLD rate (2006–16)
Mean % change in age-standardised YLD rate (2006–16)
1 Low back pain 1 Low back pain 24·8 0·0 −10·3 1 Low back pain 18·0 5·0 −2·0
2 Migraine 2 Migraine 32·3 5·9 −0·4 2 Migraine 14·3 1·6 0·1
3 Iron-deficiency anaemia 3 Iron-deficiency anemia 20·0 −3·9 1·8 3 Age-related hearing loss 22·3 8·8 −1·7
4 Major depression 4 Major depression 30·9 4·8 −2·2 4 Iron-deficiency anaemia 7·5 −4·4 −1·8
5 Age-related hearing loss 5 Age-related hearing loss 40·0 12·1 −0·2 5 Major depression 11·2 −1·1 −4·9
6 Anxiety disorders 6 Other musculoskeletal disorders 42·6 14·2 4·6 6 Neck pain 21·9 8·4 0·1
7 Other musculoskeletal disorders 7 Neck pain 41·2 13·1 −0·9 7 Other musculoskeletal disorders 14·4 1·7 −3·5
8 Neck pain 8 Anxiety disorders 30·6 4·6 −0·1 8 Diabetes 23·6 10·0 −1·2
9 Diabetes 9 Diabetes 72·9 38·4 20·2 9 Anxiety disorders 13·1 0·6 −0·7
10 Acne vulgaris 10 Acne vulgaris 24·7 −0·2 2·7 10 Falls 26·7 12·7 3·4
11 Falls 11 Falls 25·1 0·2 −9·2 11 COPD 28·8 14·5 1·4
12 Refraction and accommodation 12 Refraction and accommodation 28·1 2·6 −4·6 12 Osteoarthritis 31·5 16·9 2·4
13 Asthma 13 COPD 38·5 10·9 −2·9 13 Acne vulgaris 5·1 −6·5 2·1
14 COPD 14 Osteoarthritis 55·8 24·8 6·2 14 Refraction and accommodation 14·9 2·2 −4·9
15 Schizophrenia 15 Schizophrenia 36·0 8·9 −0·4 15 Schizophrenia 16·7 3·8 −0·9
16 Dermatitis 16 Asthma 16·1 −7·1 −7·0 16 Asthma 17·2 4·2 3·6
17 Osteoarthritis 17 Dermatitis 19·2 −4·6 −0·3 17 Ischaemic stroke 35·2 20·3 3·7
18 Opioid use disorders 18 Opioid use disorders 24·6 −0·2 −4·6 18 Dermatitis 11·6 −0·7 1·1
19 Alcohol use disorders 19 Alcohol use disorders 31·4 5·2 −1·2 19 Opioid use disorders 18·0 4·9 2·7
20 Other mental and substance 20 Other mental and substance 36·1 9·0 0·0 20 Other mental and substance 17·8 4·8 0·1
21 Diarrhoeal diseases 21 Ischaemic stroke 44·1 15·4 −1·8 21 Dysthymia 20·5 7·2 1·0
22 Dysthymia 22 Dysthymia 37·9 10·4 0·4 22 Alcohol use disorders 9·7 −2·4 −4·8
23 Ischaemic stroke 23 Bipolar disorder 32·7 6·3 0·1 23 Bipolar disorder 14·9 2·2 0·8
24 Epilepsy 24 Neonatal preterm birth 34·2 7·4 11·9 24 Edentulism 27·2 13·2 −0·9
25 Bipolar disorder 25 Diarrhoeal diseases 9·8 −12·1 −7·3 25 Neonatal preterm birth 18·4 5·3 8·5
26 Neonatal preterm birth 26 Epilepsy 17·5 −5·9 −4·7 26 Epilepsy 8·8 −3·3 −2·6
27 Conduct disorder 27 Edentulism 42·4 14·0 −2·3 27 Diarrhoeal diseases 7·5 −4·4 −3·6
28 Tension headache 28 Tension headache 32·7 6·2 −0·7 28 Tension headache 15·4 2·6 0·4
29 Edentulism 29 Conduct disorder 14·7 −8·1 −0·1 29 Ischaemic heart disease 29·3 15·0 0·5
30 Upper respiratory infections 30 Viral skin diseases 19·4 −4·4 −0·3 30 Other sense organ diseases 23·8 10·1 0·9
31 Viral skin diseases 31 Upper respiratory infections 32 Conduct disorder
33 Ischaemic heart disease 32 Ischaemic heart disease 33 Viral skin diseases
34 Other sense organ diseases 33 Other sense organ diseases 34 Upper respiratory infections
Communicable, maternal, neonatal, and nutritional
Non–communicable
Injuries

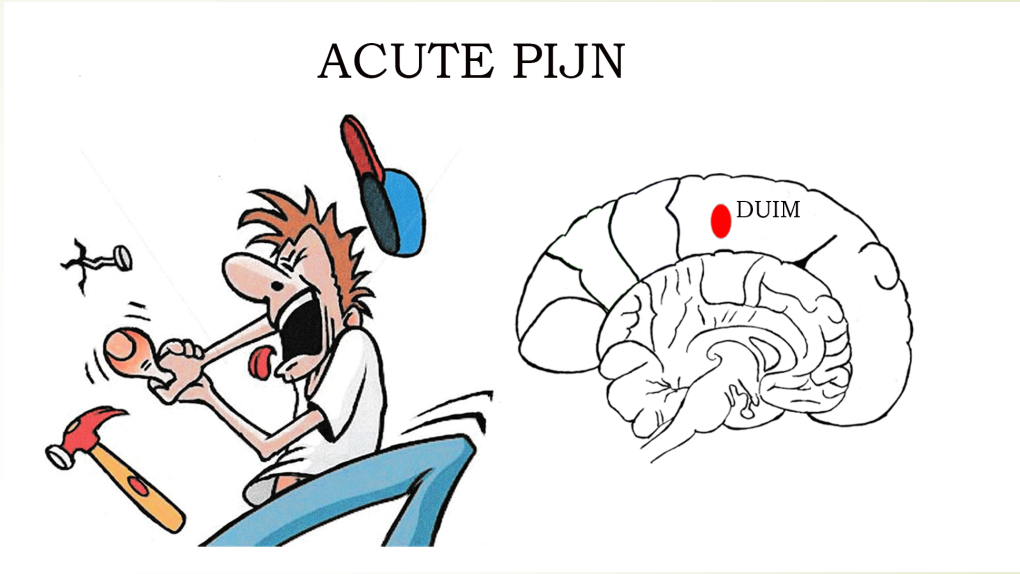
Chronische lage rugpijn - **Global burden of disease 2017**



Definitie

- Acute pijn < 3 maanden

- Chronische pijn > 3 - 6 maanden



Persistent Post Surgical Pain PPSP of CPSP

- Pain developing after a surgical procedure
- Pain of at least 2 months duration
- Other causes of pain excluded (e.g. malignancy, infection)
- Pain continuing from a pre-existing pain problem excluded

- Defintie volgens Macrae and Davies 2009

Diagnose door Werner and Kongsgaard (2014)

- develops or *increases in intensity* after a surgical procedure or a tissue injury and
- persists *beyond the healing* process
- at least *3 months* after the initiating event.
- *localised* to the surgical field or area of injury, projected to the innervation territory of a nerve situated in this area or referred to a dermatome
- Other causes of pain such as pre-existing pain conditions or infections, or malignancy etc. have to be excluded in all cases of chronic post-traumatic and postsurgical pain.

International classification of diseases

Narrative Review

PAIN®

ICD-11

The IASP classification of chronic pain for *ICD-11*: chronic postsurgical or posttraumatic pain

Stephan A. Schug[a], Patricia Lavand'homme[b], Antonia Barke[c], Beatrice Korwisi[c], Winfried Rief[c], Rolf-Detlef Treede[d,*], The IASP Taskforce for the Classification of Chronic Pain

S.A. Schug et al. • 160 (2019) 45–52

Table 1
Incidence of chronic postsurgical pain following common procedures

Surgical Type	Incidence of Chronic Postsurgical Pain, %	US Surgical Volumes, 1000s
Amputation	57–62	159
Breast surgery	27–48	479
Thoracotomy	52–61	Unknown
Herniorrhaphy	19–40	609
Coronary artery bypass graft	23–39	598
Cesarean delivery	12	220

Data from Kehlet H, Jensen TS, Woolf C. Persistent postsurgical pain: risk factors and prevention. Lancet 2006;367:1618–25.

Table 1 Procedure-specific incidence of CPSP.[12] Reprinted with permission from Elsevier

Type of surgery	Incidence of chronic pain (%)
Amputation	30–85
Thoracotomy	5–67
Mastectomy	11–57
Inguinal hernia repair	0–63
Sternotomy	28–56
Cholecystectomy	3–56
Knee arthroplasty	19–43
Breast augmentation	13–38
Vasectomy	0–37
Radical prostatectomy	35
Gynaecological laparotomy	32
Iliac crest bone harvest site	30
Hip arthroplasty	28
Saphenectomy	27
Hysterectomy	25
Craniotomy	6–23
Rectal amputation	12–18
Caesarean section	12
Dental surgery	5–13

Chronic post-surgical pain Searle, RD ; Simpson, Kh
Continuing Education in Anaesthesia Critical Care & Pain, February 2010, Vol.10(1), pp.12-14

Table 1

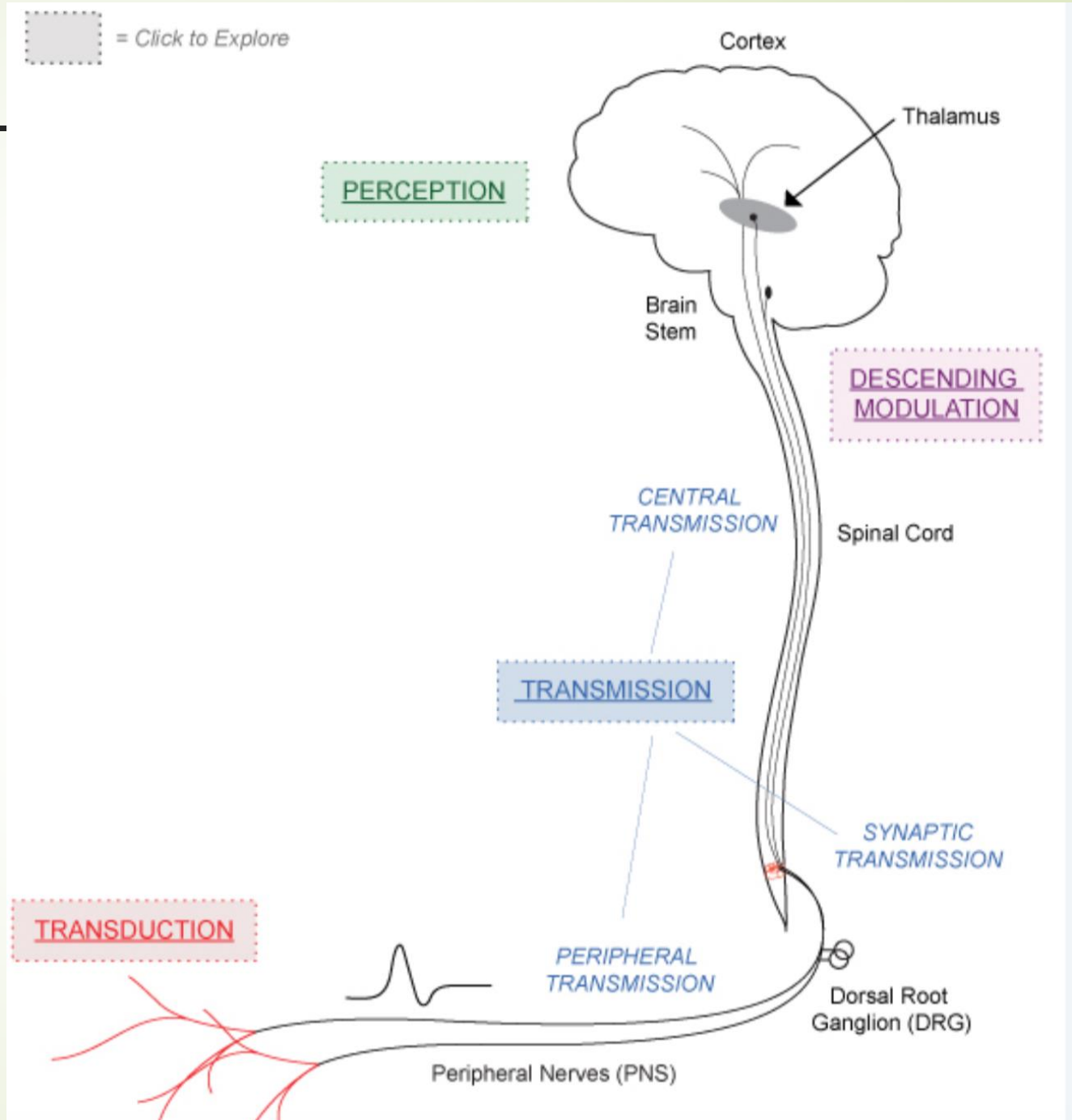
Incidence of chronic postsurgical pain (CPSP), severe CPSP, and the proportion of neuropathic pain in CPSP.

Type of surgery	Incidence of all CPSP	Incidence of severe CPSP (>5/10 of 10/10)	Proportion of neuropathic pain in CPSP
Abdominal surgery (bowel and colorectal)	17%-21%	Not reported	Not reported
Amputation	30%-85%	5%-10%	80%
Caesarean delivery	6%-55%	5%-10%	50%
Cholecystectomy	3%-50%	Not reported	Not reported
Craniotomy	7%-30%	25%	Not reported
Dental surgery	5%-13%	Not reported	Not reported
Hip arthroplasty	27%	6%	1%-2%
Inguinal herniotomy	5%-63%	2%-4%	80%
Knee arthroplasty	13%-44%	15%	6%
Melanoma resection	9%	Not reported	Not reported
Mastectomy	11%-57%	5%-10%	65%
Sternotomy	7%-17%	Not reported	Not reported
Thoracotomy	5%-65%	10%	45%
Vasectomy	0%-37%	Not reported	Not reported

With permission from Ref. 54.

ICD 11: S.A. Schug et al. • 160 (2019) 45–52

Wat is pijn -

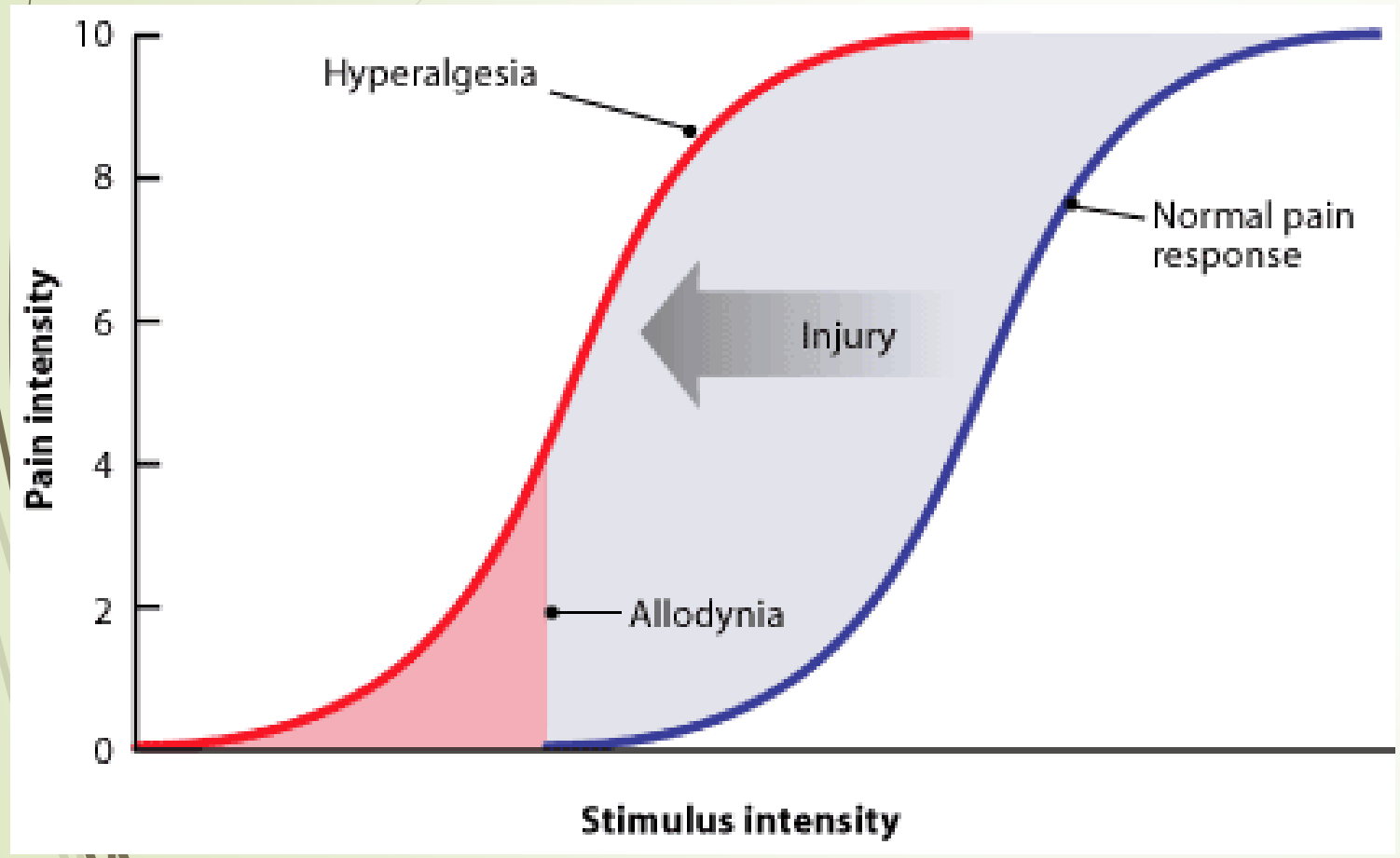

= Click to Explore
Cortex
Thalamus
PERCEPTION
Brain Stem
DESCENDING MODULATION
CENTRAL TRANSMISSION
Spinal Cord
TRANSMISSION
SYNAPTIC TRANSMISSION
TRANSDUCTION
PERIPHERAL TRANSMISSION
Dorsal Root Ganglion (DRG)
Peripheral Nerves (PNS)

Chapman et al.

5 Mechanismen (al dan niet in combinatie) voor ontstaan van CPSP

1. *peripheral sensitization* via inflammation and/or nerve injury.
2. *maladaptive central neural plasticity* at spinal and higher levels (central sensitization), caused by opioids (particularly when given preoperatively), stress, and other factors.`
3. *compromised descending nociceptive inhibition*: among other factors, it has been hypothesized that the excessive administration of exogenous opioids can impair the functioning of this system via negative feedback.
4. *pathological descending nociceptive facilitation*: among other factors, cognitive factors such as ex- pectations, anxiety, and a catastrophizing tendency can apparently influence the systems that inhibit and facilitate pain, yielding both placebo and noce- bo effects.
5. *alterations of brain function*, connectivity, and structure (cerebral plasticity), for example, in phantom pain. Changes in the representative zones of the sensory cortex can be associated with the generation and disappearance of phantom pain and other types of pain.

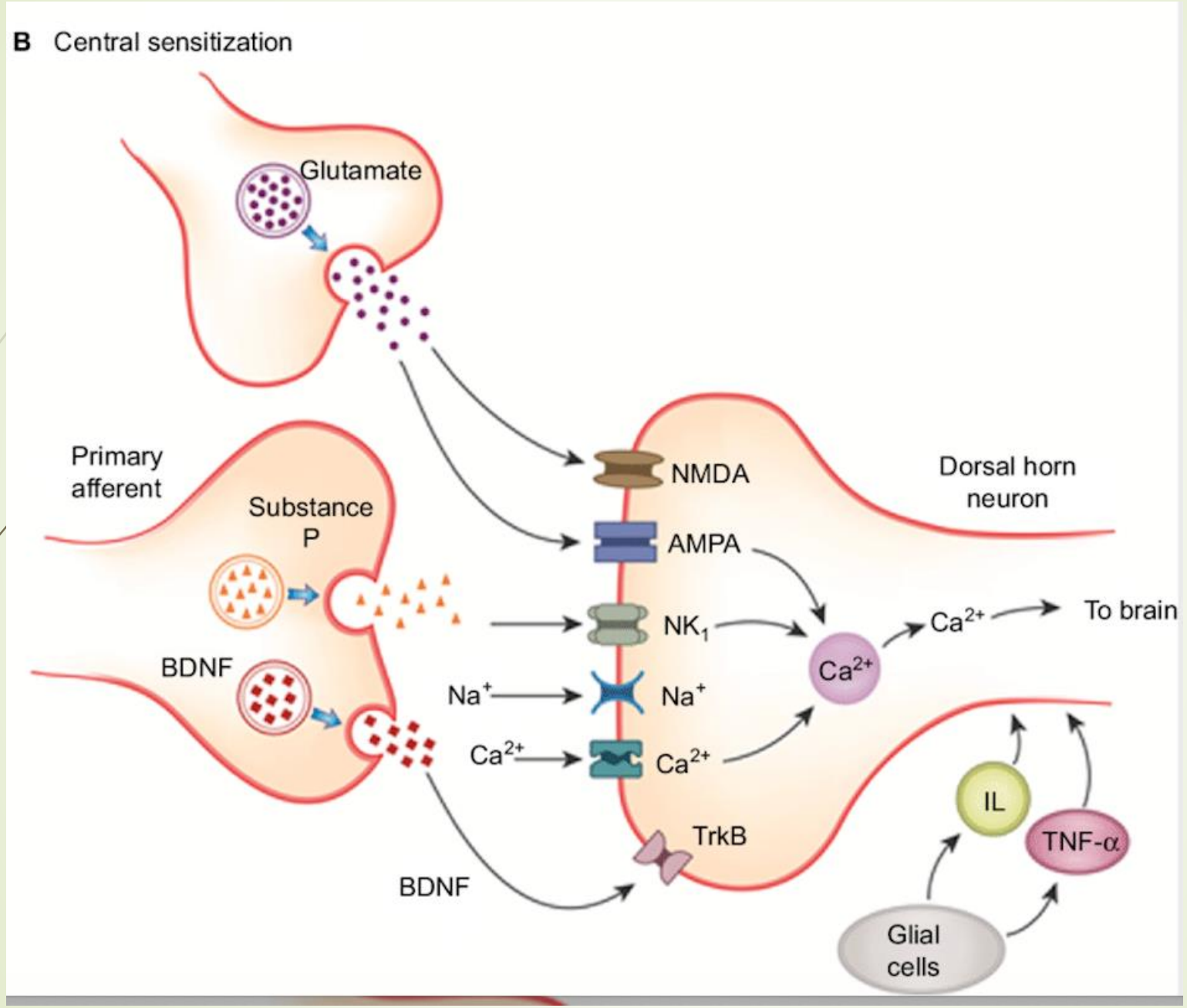
centrale sensitisatie



Excitabiliteit ↑
Synpatische efficaciteit ↑

Faciliatie
Activatie
Augmentatie
Potentiatie

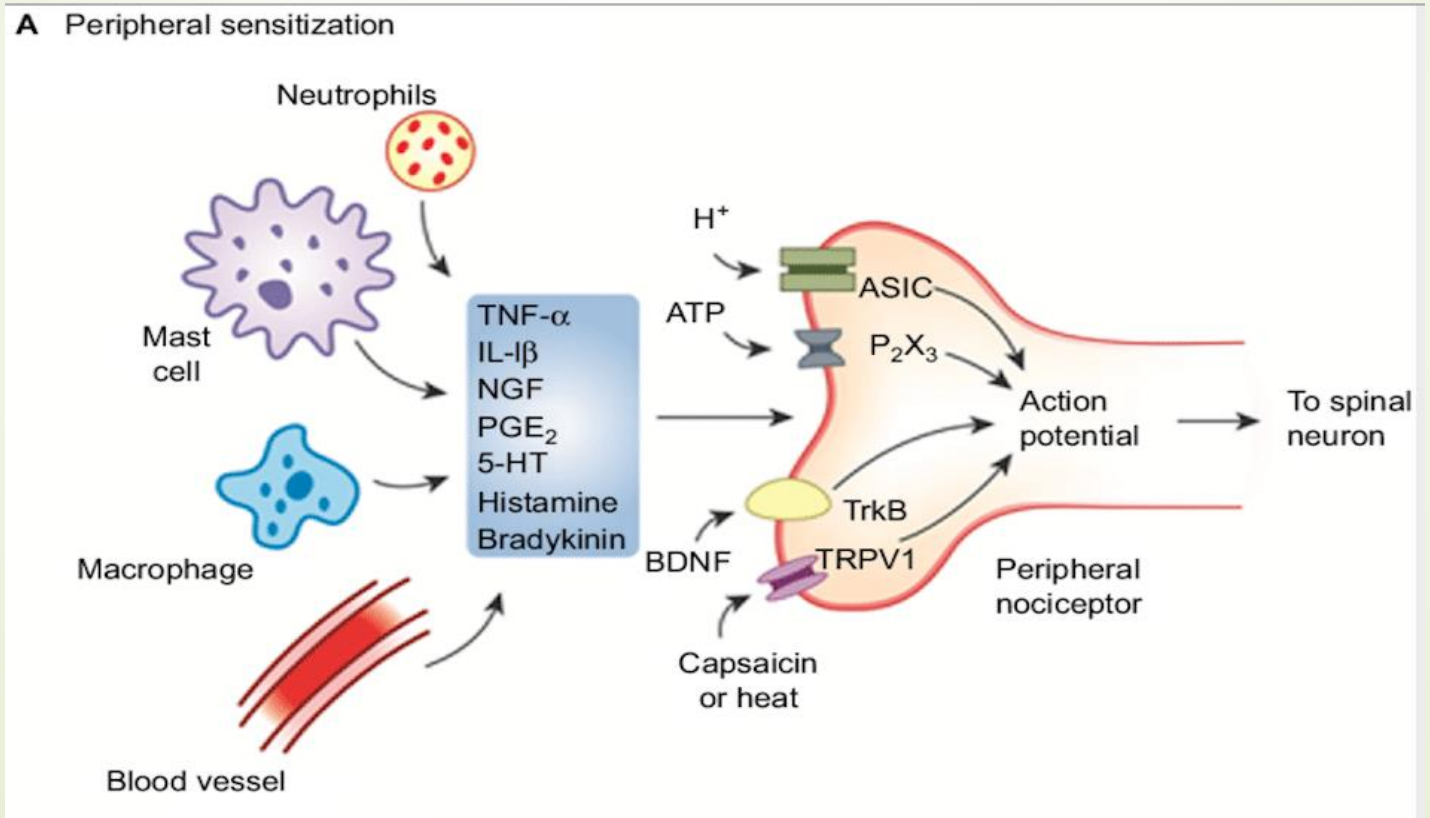
Hyperalert systeem


B Central sensitization
Glutamate
Primary afferent
Substance P
BDNF
NMDA
AMPA
NK1
Na+
Na+
Ca2+
Ca2+
Dorsal horn neuron
Ca2+
To brain
TrkB
BDNF
IL
TNF-α
Glial cells

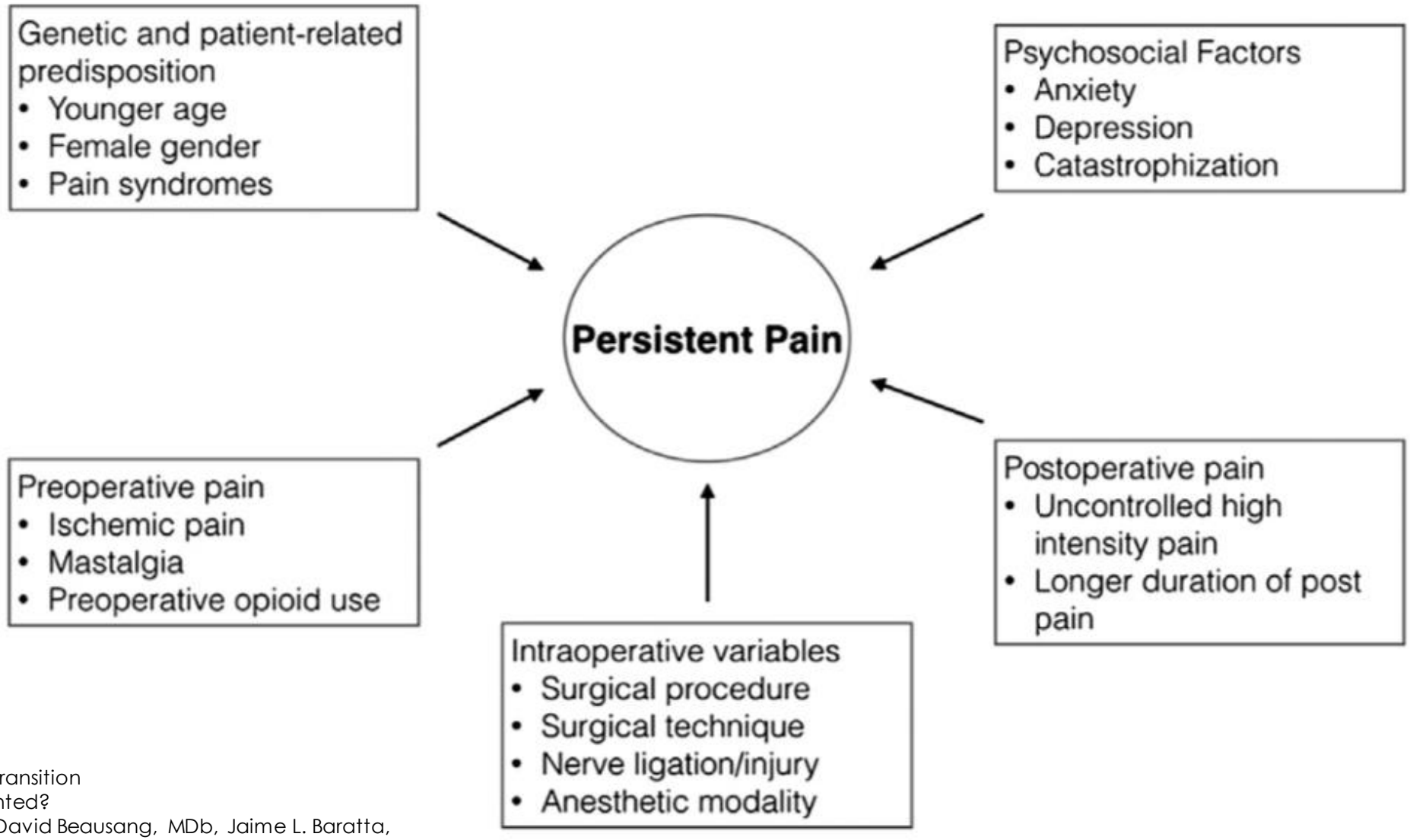
Perifere sensitisatie

Drempelverlaging en amplificatie in respons van nociceptoren in gebied van schade-inflammatie

-> Pijnklachten binnen gebied van schade



CPSP



The Acute to Chronic Pain Transition
Can Chronic Pain Be Prevented?
John-Paul J. Pozek, MDa,*, David Beausang, MDb, Jaime L. Baratta, MDa, Eugene R. Viscusi, MDb
Med Clin N Am 100 (2016) 17–30

The main risk factors for CPSP

- pre-existing (preoperative) chronic pain
- opioid intake
- a pain-related catastrophizing tendency
- intraoperative nerve injury
- severe acute postoperative pain

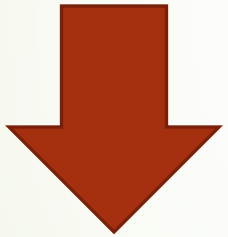
CPSP is reported to be *especially common* after

- thoracic surgery
- breast surgery
- amputations
- orthopedic procedures

Verband intensiteit acute pijn post operatief vs CPSP

-> causaal of zelfde epifenomeen?

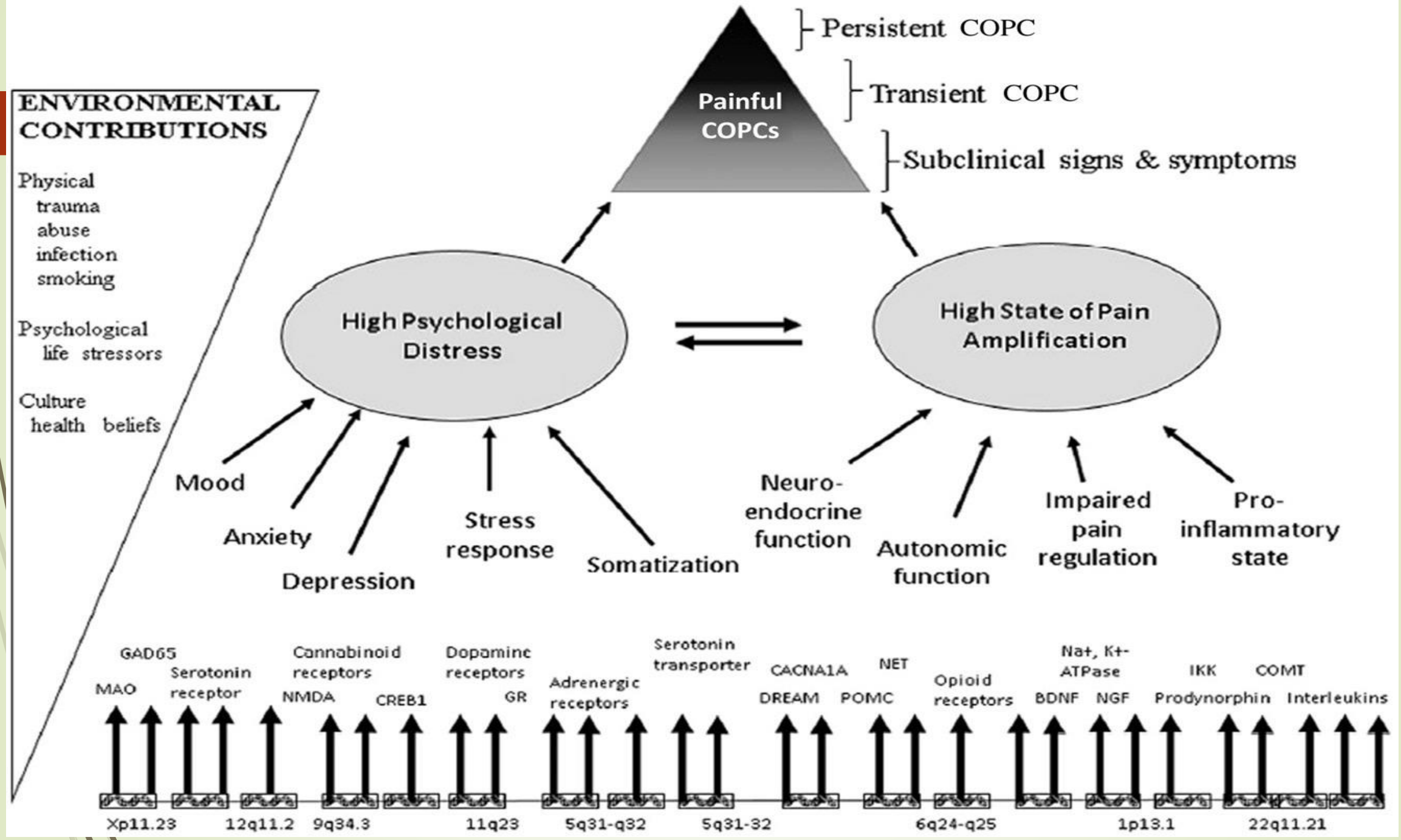
- 10% toename van acute pijn post operatief



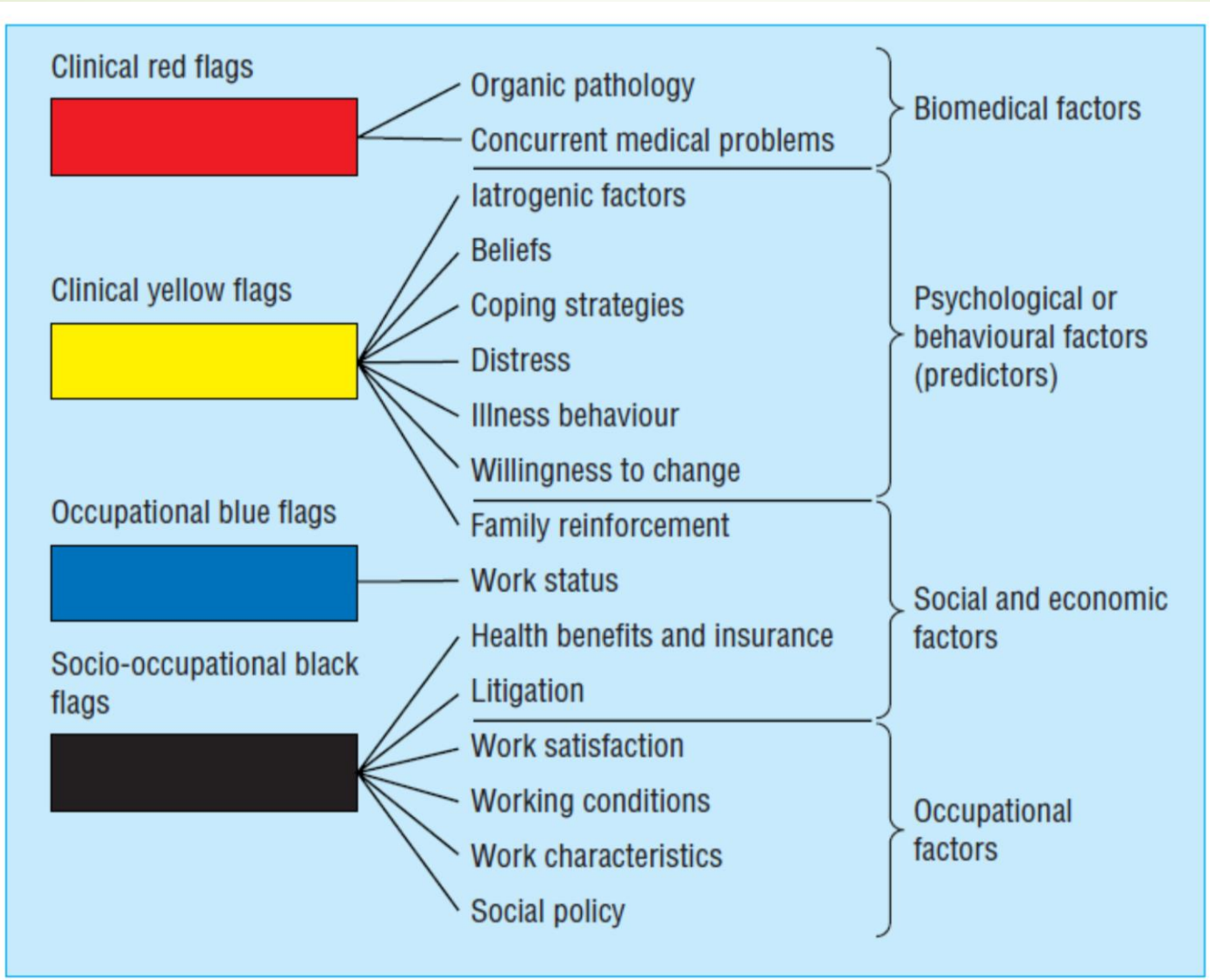
- geeft 30% stijging van indicentie CPSP

Risicofactoren (niet CPSP)

- Demografie (e.g. level educatie, vrouw, ouder, poor health status)
- Epigenetica (Fenotypische variatie in functie van exposure)
- Acute pijn karakteristieken (e.g. acute pain intensity/ernst, duur, cummulatief trauma)
- Psychosociale factoren (e.g. hogere baseline waarde voor angst, negatief denken over pijn, depressie, catastroferen, kwetsbaarheid)


ENVIRONMENTAL CONTRIBUTIONS
Physical
trauma
abuse
infection
smoking
Psychological
life stressors
Culture
health beliefs
Painful COPCs
Persistent COPC
Transient COPC
Subclinical signs & symptoms
High Psychological Distress
High State of Pain Amplification
Mood
Anxiety
Depression
Stress response
Somatization
Neuro-endocrine function
Autonomic function
Impaired pain regulation
Pro-inflammatory state
GAD65
MAO
Serotonin receptor
Cannabinoid receptors
NMDA
CREB1
Dopamine receptors
GR
Adrenergic receptors
Serotonin transporter
CACNA1A
DREAM
NET
POMC
Opioid receptors
Na+, K+-ATPase
BDNF
NGF
IKK
Prodynorphin
COMT
Interleukins
Xp11.23
12q11.2
9q34.3
11q23
5q31-q32
5q31-32
6q24-q25
1p13.1
22q11.21

Vlaggen systeem



Bron: Main & Williams 2002 BMJ Musculoskeletal Pain

Herkennen vragen lijsten?

HADS? / TSK

Gewoon gesprek ?

Observeer uw patiënt

Meten = weten

- Noteer
- Organiseer
- Structureer
- maw pijnbevraging en pijn observatie ALTIJD bevragen
- = alle andere parameters
- Maar hou het praktisch en vergader niet te veel = patiënten zitten niet in de vergaderruimte

NARRATIVE REVIEW ARTICLE

American Society for Enhanced Recovery and Perioperative Quality Initiative Joint Consensus Statement on Perioperative Management of Patients on Preoperative Opioid Therapy

David A. Edwards, MD, PhD,* Traci L. Hedrick, MD, MS, FACS, FASCRS,† Jennifer Jayaram, APRN, MSN,* Charles Argoff, MD,‡ Padma Gulur, MD,§ Stefan D. Holubar, MD, MS, FACS, FASCRS,‖ Tong J. Gan, MD, MBA, MHS, FRCA,¶ Michael G. Mythen, MBBS, MD, FRCA, FFICM, FCAI (Hon),# Timothy E. Miller, MB, ChB, FRCA,§ Andrew D. Shaw, MB, FRCA, FFICM, FCCM, MMHC,** Julie K. M. Thacker, MD, FACS, FASCRS,†† and Matthew D. McEvoy, MD,* POQI-4 Working Group

See Editorial, p 324

- Anesthesie-Analgesia 2019 Vol 123

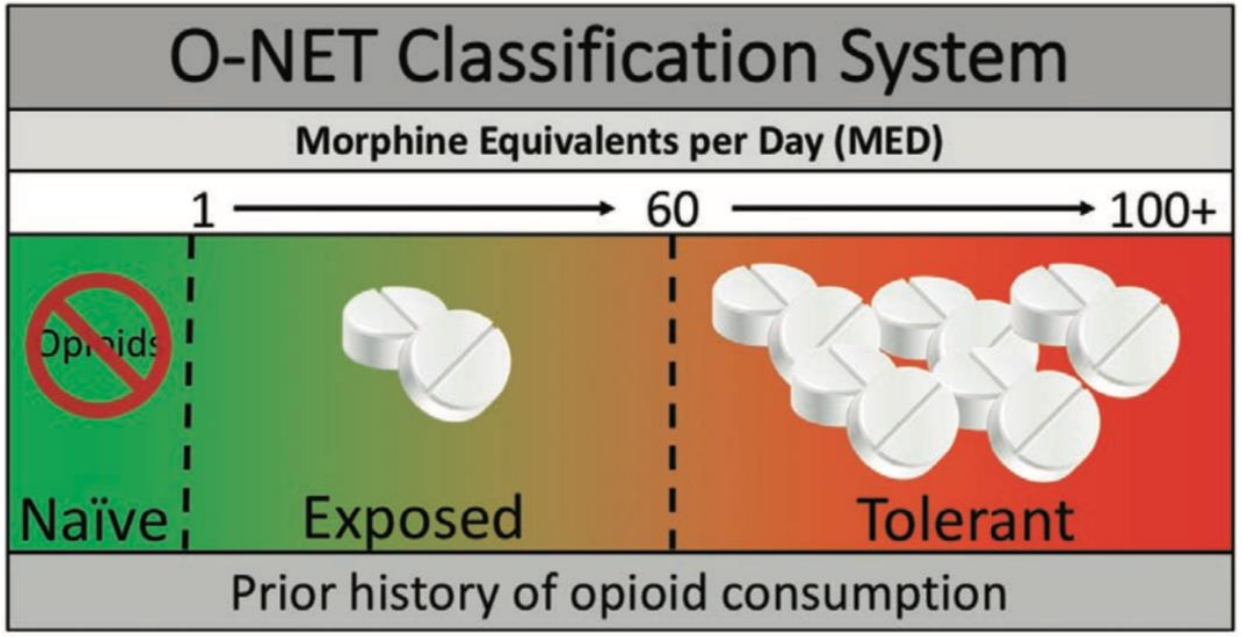


Figure 1. In the preoperative period, patients are divided into the classes opioid-naïve, opioid exposed, and opioid tolerant based on the milligram MED used. Opioid-naïve indicates no opioid use in the 90 d before surgery; opioid exposed, any amount <60 MED used in the 90 d before surgery; and opioid tolerant, ≥60 MED within 7 d of surgery. MED indicates morphine equivalent dose; O-NET, opioid-naïve, exposed, and tolerant. Figure reused with the permission of the Perioperative Quality Initiative (POQI). For permission requests, contact info@poqi.org.

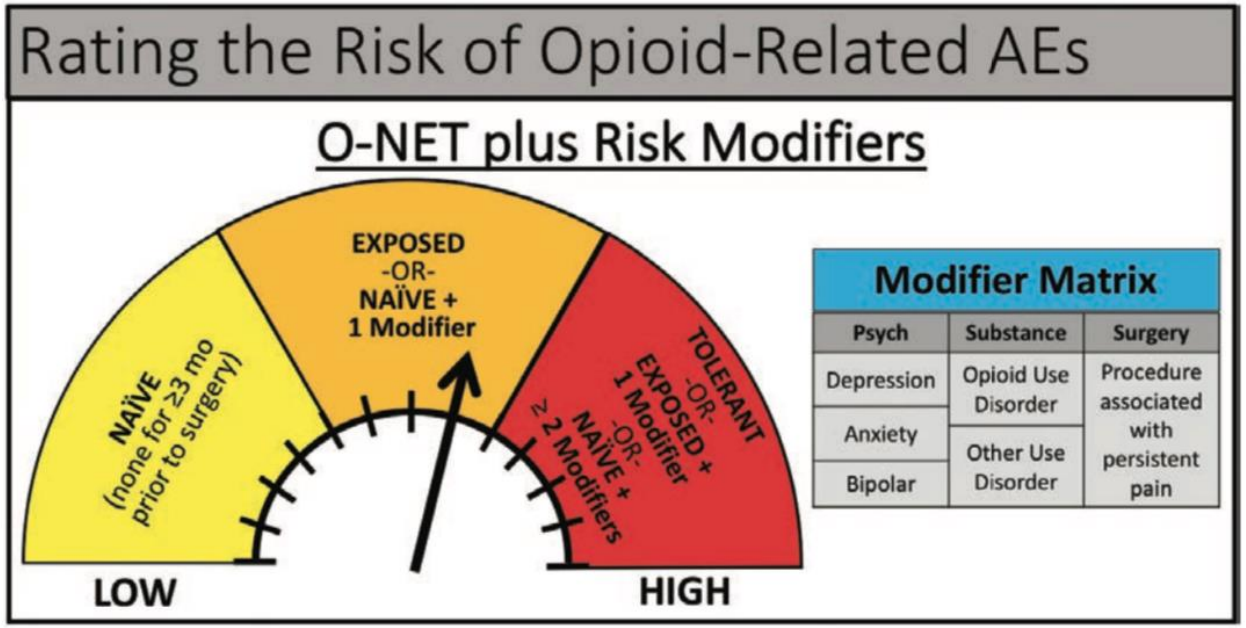
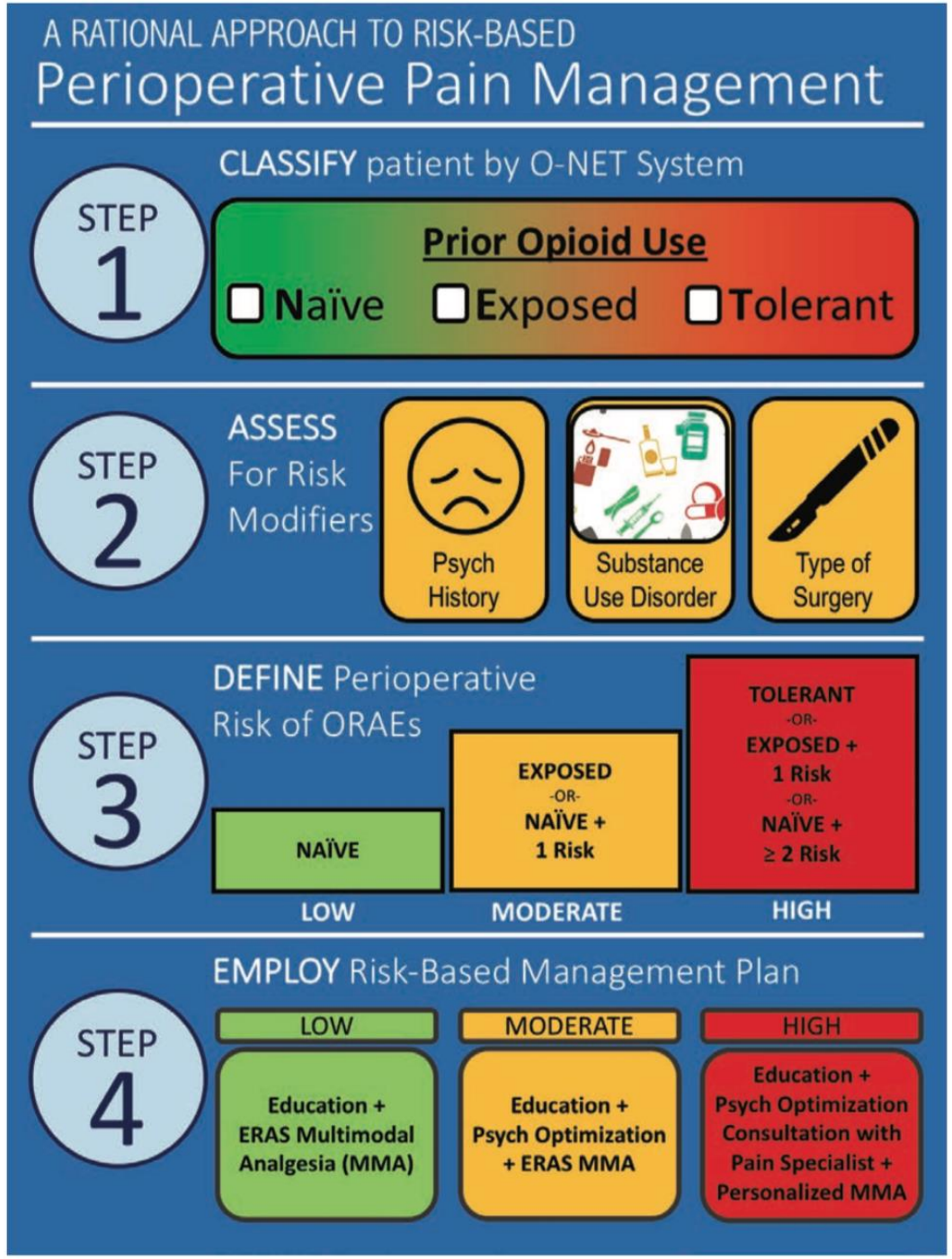


Figure 2. O-NET classes represent low-, moderate-, and high-risk groups for opioid-related adverse events and poor outcomes. Addition of comorbid risk factors known to influence the risk of opioid-related poor outcomes modify the risk group assignment. AE indicates adverse events; O-NET, opioid-naïve, exposed, and tolerant. Figure reused with the permission of the Perioperative Quality Initiative (POQI). For permission requests, contact info@poqi.org.


A RATIONAL APPROACH TO RISK-BASED
Perioperative Pain Management
STEP 1
CLASSIFY patient by O-NET System
Prior Opioid Use
Naïve
Exposed
Tolerant
STEP 2
ASSESS For Risk Modifiers
Psych History
Substance Use Disorder
Type of Surgery
STEP 3
DEFINE Perioperative Risk of ORAEs
NAÏVE
EXPOSED -OR- NAÏVE + 1 Risk
TOLERANT -OR- EXPOSED + 1 Risk -OR- NAÏVE + ≥ 2 Risk
LOW
MODERATE
HIGH
STEP 4
EMPLOY Risk-Based Management Plan
LOW
Education + ERAS Multimodal Analgesia (MMA)
MODERATE
Education + Psych Optimization + ERAS MMA
HIGH
Education + Psych Optimization Consultation with Pain Specialist + Personalized MMA

Risico- inschatting

- Belang geindividualiseerd traject
- Beoordeling pre operatieve pijn
- Beoordeling acute pijn- neuropathische component?
- Karakteristieken van pijn -> sensitisatie

- -> focus ook op pre operatieve pijncontrole?

Vraag 1:

Vertoont de pijn één of meerdere van de volgende karakteristieken? Voor elke JA een punt toekennen!

1. Branderig gevoel. 2. Pijnlijk koudegevoel 3. Elektrische schokken

Vraag 2:

Is de pijn in hetzelfde gebied geassocieerd met één of meerdere van de volgende symptomen? Voor elke JA een punt toekennen!

4. Kriebelingen. 5. Tintelingen 6. Gevoelloosheid 7. Jeuk.

Een score van 3 op 7 ondersteunt de diagnose neuropathische pijn.

De volgende 2 vragen worden beantwoord bij lichamelijk onderzoek door arts.

Vraag 3:

Is er: (Voor elke JA een punt toekennen):

8. hypo-esthesie bij aanraking (dat wil zeggen minder huidgevoel)
9. hypo-esthesie bij een prik (dat wil zeggen minder pijngevoel)

Vraag 4:

Wordt de pijn veroorzaakt of versterkt door

10. wrijven

Een score van 4 op 10 op wanneer alle vragen zijn beantwoord, geeft aan dat er hoogstwaarschijnlijk sprake is van een neuropathie.

Mental health

- Kwetsbare populatie
- Angst
- Depressie
- Hypervigilantie
- Catastroferen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by Mark Parisi
OK, YOU MAY HEAR A CRACK...
CHIROPRACTOR
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EJP
European Journal of Pain

REVIEW ARTICLE

A systematic review of therapeutic interventions to reduce acute and chronic post-surgical pain after amputation, thoracotomy or mastectomy*

S.R. Humble[1,2], A.J. Dalton[3], L. Li[3]

1 Department of Anaesthetics and Pain Management, Charing Cross Hospital, London, UK
2 Peripheral Neuropathy Unit, Hammersmith Hospital Campus, Imperial College London, Du Cane Road, London, UK
3 Department of Anaesthetics and Pain Management, Ninewells Hospital and Medical School, Dundee, UK

Eur J Pain **19** (2015) 451–465

Multimodale analgesie

- Niet opioide analgetica
- Opioiden aanpassen van dosis, timing, rotatie
- Additieven gabapentinoiden, lidocaine, ketamine, clonidine, magnesium, corticosteroiden
- Locoregionale anesthesie
- Neuraxiale anesthesie

The NEW ENGLAND JOURNAL of MEDICINE

REVIEW ARTICLE

MEDICAL PROGRESS

Opioid Therapy for Chronic Pain

Jane C. Ballantyne, M.D., and Jianren Mao, M.D., Ph.D.

N Engl J Med 2003;349:1943-53.

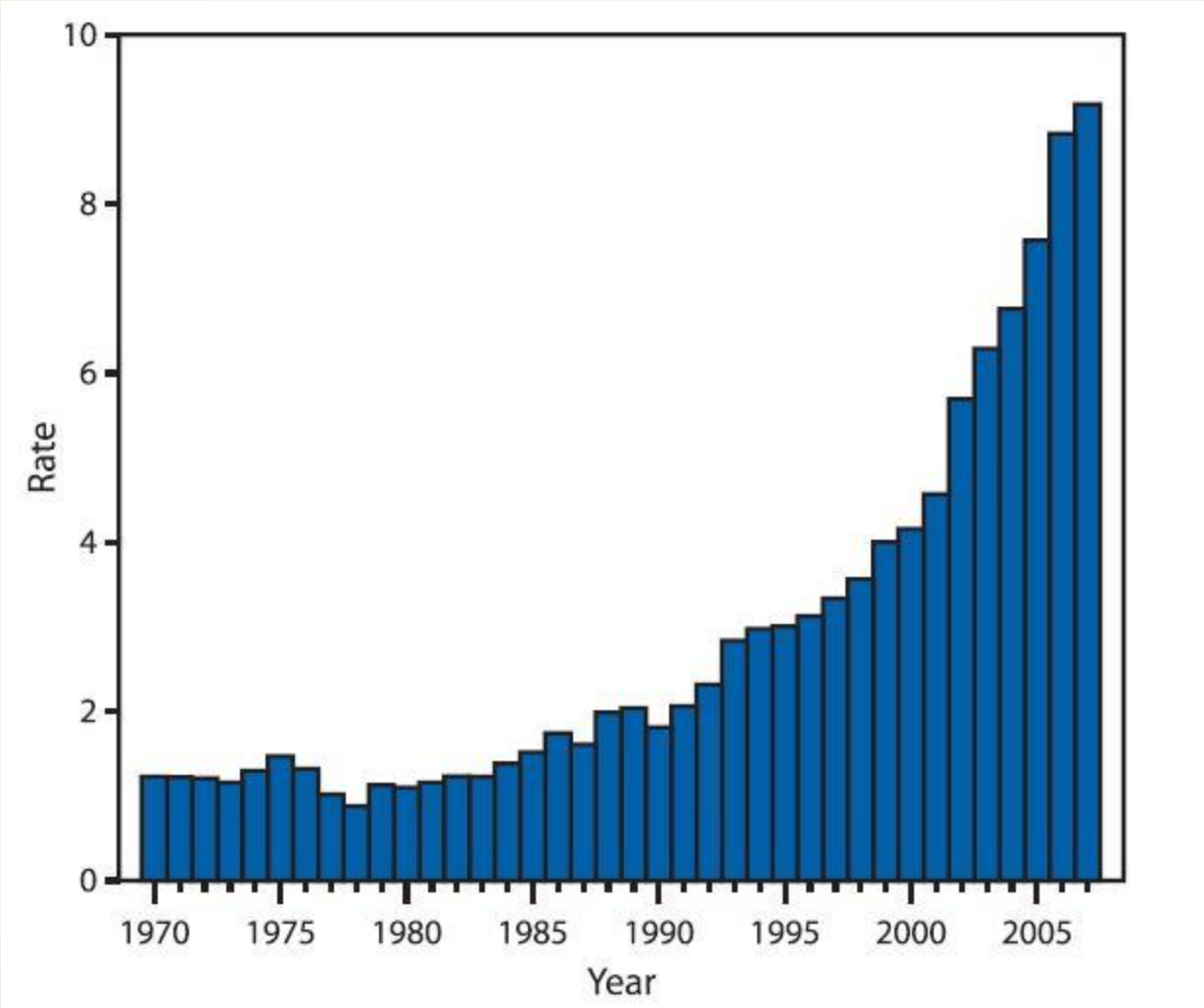
Opioid therapy for chronic pain

- Literature: surveys/uncontrolled case series
- Observations:
  - good pain relief
  - Doses are not escalating
  - risk for addiction is minimal
  - effective for neuropathic pain

Ballantyne and Mao. NEJM 2003; 349:1943-1953

- In most studies : moderate doses (up to 180 mg MED)
- Functional improvement and preservation of cognitive function
- Duration 14/16 studies < 32 weeks

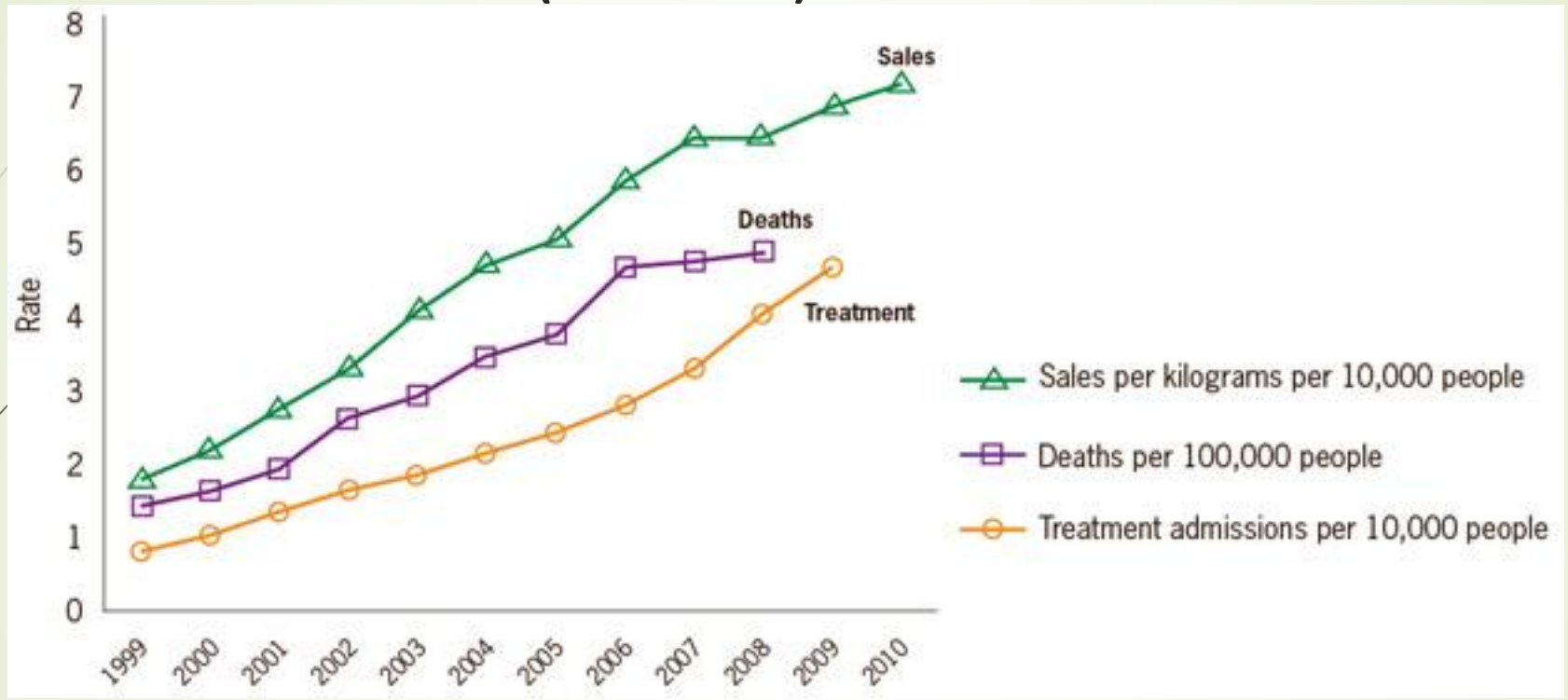
Rates (per 100 000) of unintentional drug overdose deaths 1970-2007



Paulozzi, JAMA, 2012—Vol 307, No. 8

Bron: national vital statistics systems, cdc

Rates of prescription painkiller sales, deaths and substance abuse treatment admissions (1999-2010)



Bron: National Vital Statistics System, 1999-2008; Automation of Reports and Consolidated Orders System (ARCOS) of the Drug Enforcement Administration (DEA), 1999-2010; Treatment Episode Data Set, 1999-2009

LESS IS MORE

Opioid Dose and Drug-Related Mortality in Patients With Nonmalignant Pain

Tara Gomes, MHSc; Muhammad M. Mamdani, PharmD, MA, MPH; Irfan A. Dhalla, MD, MSc; J. Michael Paterson, MSc; David N. Juurlink, MD, PhD

Background: Opioids are widely prescribed for chronic nonmalignant pain, often at doses exceeding those recommended in clinical practice guidelines. However, the risk-benefit ratio of high-dose opioid therapy is not well characterized. The objective of this study was to characterize the relationship between opioid dose and opioid-related mortality.

Methods: We conducted a population-based nested case-control study of Ontario, Canada, residents aged 15 to 64 years who were eligible for publicly funded prescription drug coverage and had received an opioid from August 1, 1997, through December 31, 2006, for nonmalignant pain. The outcome of interest was opioid-related death, as determined by the investigating coroner. The risk of opioid-related death was compared among patients treated with various daily doses of opioids.

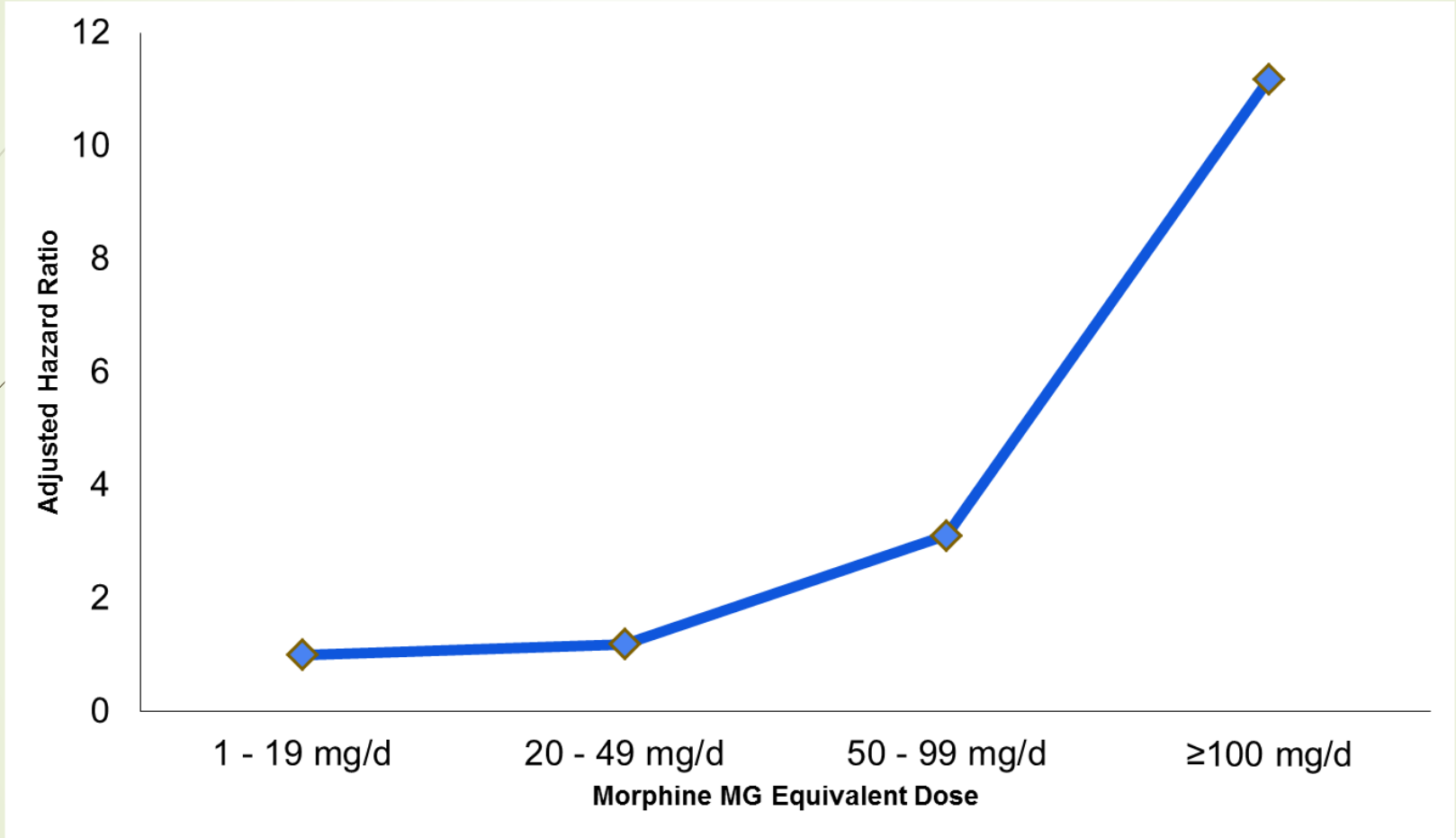
Results: Among 607 156 people aged 15 to 64 years prescribed an opioid over the study period, we identified 498 eligible patients whose deaths were related to opioids and 1714 matched controls. After extensive multivariable adjustment, we found that an average daily dose of 200 mg or more of morphine (or equivalent), was associated with a nearly 3-fold increase in the risk of opioid-related mortality (odds ratio [OR], 2.88; 95% confidence interval [CI], 1.79-4.63) relative to low daily doses (<20 mg of morphine, or equivalent). We found significant but attenuated increases in opioid-related mortality with intermediate doses of opioids (50-99 mg/d of morphine: OR, 1.92; 95% CI, 1.30-2.85; 100-199 mg/d of morphine: OR, 2.04; 95% CI, 1.28-3.24).

Conclusion: Among patients receiving opioids for nonmalignant pain, the daily dose is strongly associated with opioid-related mortality, particularly at doses exceeding thresholds recommended in recent clinical guidelines.

Arch Intern Med. 2011;171(7):686-691

Annals of Internal Medicine
Established in 1927 by the American College of Physicians

High Opioid Dose and Overdose Risk



*** Overdose defined as death, hospitalization, unconsciousness, or respiratory failure.**

Dunn et al. Ann Int Med 2010;152:85-92

Other possible problems

- Bowel obstruction/chronic constipation
- Osteoporosis / fractures
- Cardiovascular events
- OSAS
- Hyperalgesia
- Xerostomie and consequently dental problems
- Neuro-endocrine dysfunction
- **† Respiratory depressie / unintentional overdose**

Dunn et al. Ann Intern Med 2010; 152:85-95

Rhodin et al. Clin J Pain 2010;26(5):374-80

Clinical Review & Education

Special Communication

CDC Guideline for Prescribing Opioids for Chronic Pain—United States, 2016

Deborah Dowell, MD, MPH; Tamara M. Haegerich, PhD; Roger Chou, MD

JAMA. 2016;315(15):1624-1645. doi:10.1001/jama.2016.1464
Published online March 15, 2016.

IMPORTANCE Primary care clinicians find managing chronic pain challenging. Evidence of long-term efficacy of opioids for chronic pain is limited. Opioid use is associated with serious risks, including opioid use disorder and overdose.

Recommendations

- **Nonopioid** therapy is **preferred** for treatment of chronic pain.
- Opioids only when **benefits** for pain and function **outweigh risks**.
- Before starting establish **treatment goals** and plan discontinuation.
- Prescribe the **lowest effective dosage**.
- **Reassess** when considering increasing dosage (critical dose 50 mg)
- Avoid concurrent opioids and **benzodiazepines.**
- **Reassess every 3 months** or more frequently and stop if necessary

Dus…

- Opioiden kunnen
- Maar komen samen met opvolging en afbouwplan

Lokale anesthetica

- Intraveneuze lidocaine bolus en ct infuus bij mastectomie
- Lidocaine 1,5 mg/kg bolus + 1,5 mg/kg/h
- 37 patienten: 2 groepen
- Follow up : minder CPSP (via McGill vragenlijst) HADS

ORIGINAL ARTICLE

Perioperative Intravenous Lidocaine Decreases the Incidence of Persistent Pain After Breast Surgery

Anca Grigoras, MD, Peter Lee, MD, Faisal Sattar, BSc, and George Shorten, PhD

Lokale anesthestica

- Meer evidentie voor perineuraal/neuraxiaal
- Bv epidurale voor thoracotomie:
  - NNT 4 – 7 ter preventie CPSP

Totaal intraveneuze anesthesie

- Propofol en remifentanyl
- **Remifentanyl – ''janus'' quid OIH**

- Gemedieerd via GABA (propofol) en glycine

- Raghavan en al 2011
- Song et Al 2012

Ketamine

- NMDA receptor anatgonist
- Anesthesie, analgesie, anti-hyperalgesie en anti-inflammatoir
- ‘Special K’
- NMDA receptor - sensitisatie
- Evidentie intra- operatief bij ‘opioid tolernante’ kan opioid sparend werken
- meta-analysis in 2014 McNicol – CPSP daalde
- Vermoedelijk vnl baat bij complexe, hoog opioidverbruik

Gabapentinoiden

- Pregabaline (Lyrica) en Gabapentine (Neurontin)
- Blok a2d subunits van voltage-gated calcium kanaal
- Vier systematic reviews en meta-analyses -> gemengd
- Te weinig bewijs
- Minder brandend gevoel
- Cave neveneffecten : AH depressie

Corticosteroiden

- Verminderde expressie van pro- inflammatoire cytokines
- Inductie van expressie van anti-inflammatoire cytokines
- Minder PG
- Minder glia cel –expressie
- Studies gemengd resultaat-> inconclusive
- Inclusie in ERAS protocols

Locoregionale technieken

- Afhankelijk van type van heelkunde
- Sterk bewijs voor minder acute pijn
- Superieur tov opioiden
- Amputatie met perineurale catheter in situ hadden minder acute pijn, minder chronische pijn en minder opioidenverbuik.

Knie- arthroplastie

- Femoraal block SS
- Femoraal catheter
- Epiduraal (minder owv immobilisatie)
- Adductor kanaal SS
- Genicular block
- IPACK

Heup artroplastie

- Fascia Iliaca block
- Hip block
- Peri articular block

Mastectomie

- PECS 1 en 2
- Serratus plane
- Paravertebraal block

Thoracotomie/scopie

- Epiduraal
- Paravertebraal
- Infiltratie

Psychologie

- 2011, Riddle et al.
- Gedragsinterventie specifiek bij sterk catastroferende patiënten voor TKP
- 8 sessies coping skills training voor hkde
- Controle na 2 maanden: beter pijnscores


off the mark.com
by Mark Parisi
ONE WAY TO RELIEVE STRESS IS TO PAT MY FUR WHILE TELLING ME HOW CUTE I AM...
offthemark.com
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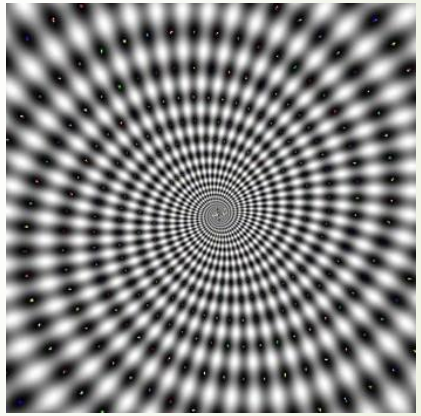
Rol van de chirurg

- Noodzaak heelkunde
- Minimaal invasief?
- Technieken met minder zenuwschade

Alternatieve technieken

- Afleiding
- Muziek
- VR
- Hypnose
- TENS



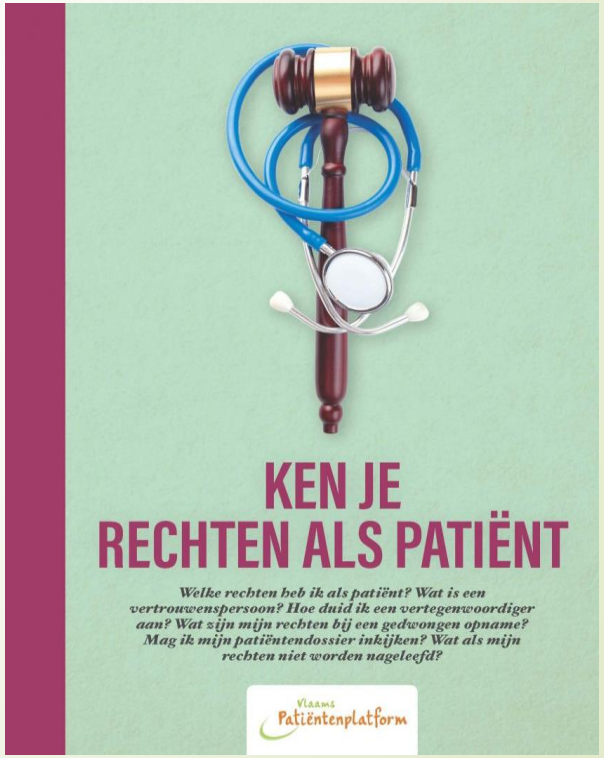
SAMENGEVAT

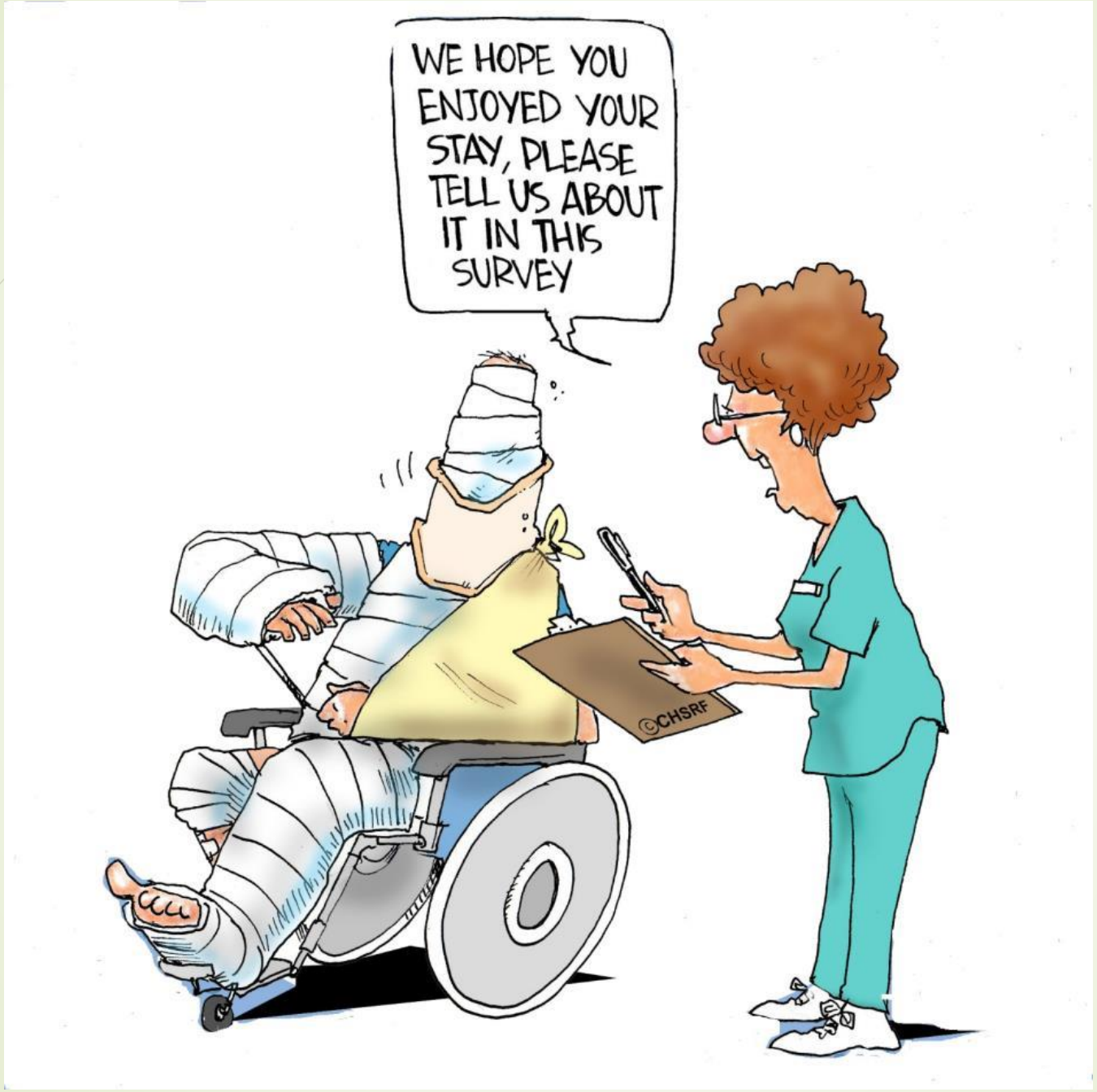
- CPSP is een relevant probleem
- Pre operatieve pijn, acute en catastroferen zijn gecorreleerd met CPSP
- Multimodale analgesie
- Biopsychosociaal model
- Teamwork

Pijncontrole = basisrecht

- DUS iedere patiënt heeft recht op
- bevraging ivm pijn
- therapie ivm pijn

- Proberen pijnvermindering te bekomen,
- en geen bijkomende neveneffecten

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