

Wat kunnen we leren
van pijneducatie?

Gluren bij de burens

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*psycholoog, fysiotherapeut,
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Gluren bij de buren
Dat is toch niet normaal!

Goede buren en minder goede (slechte) buren



ZUIDERBUREN



Wat kunnen
we leren van
pijneducatie!

Het sensitisatiemodel: een methode om een patiënt uit te leggen wat chronische pijn is

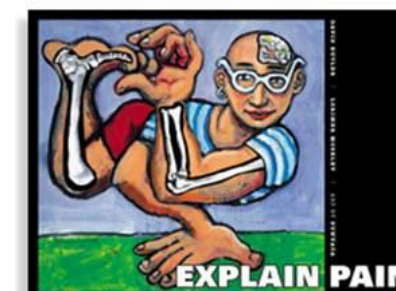
C.P.VAN WILGEN EN D.KEIZER



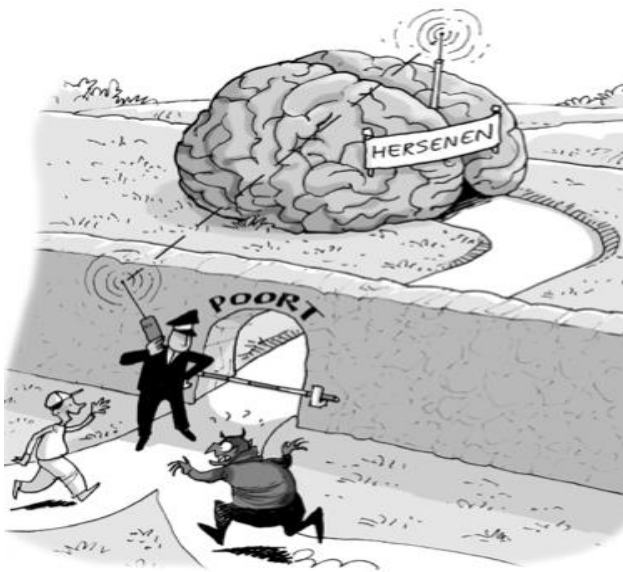
LANNOO
CAMPUS



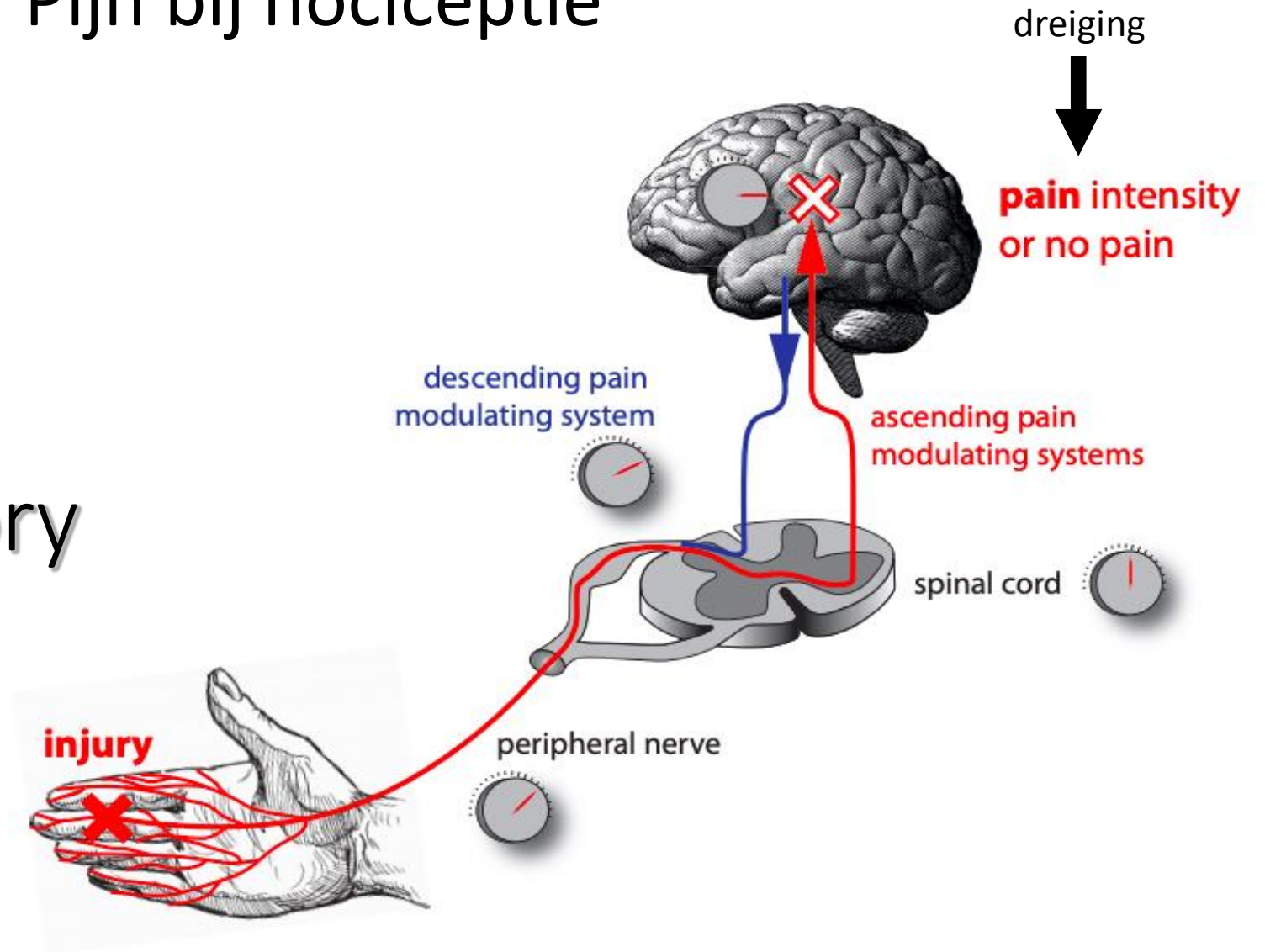
PATIENTENVERSIE
Zorgstandaard
Chronische Pijn



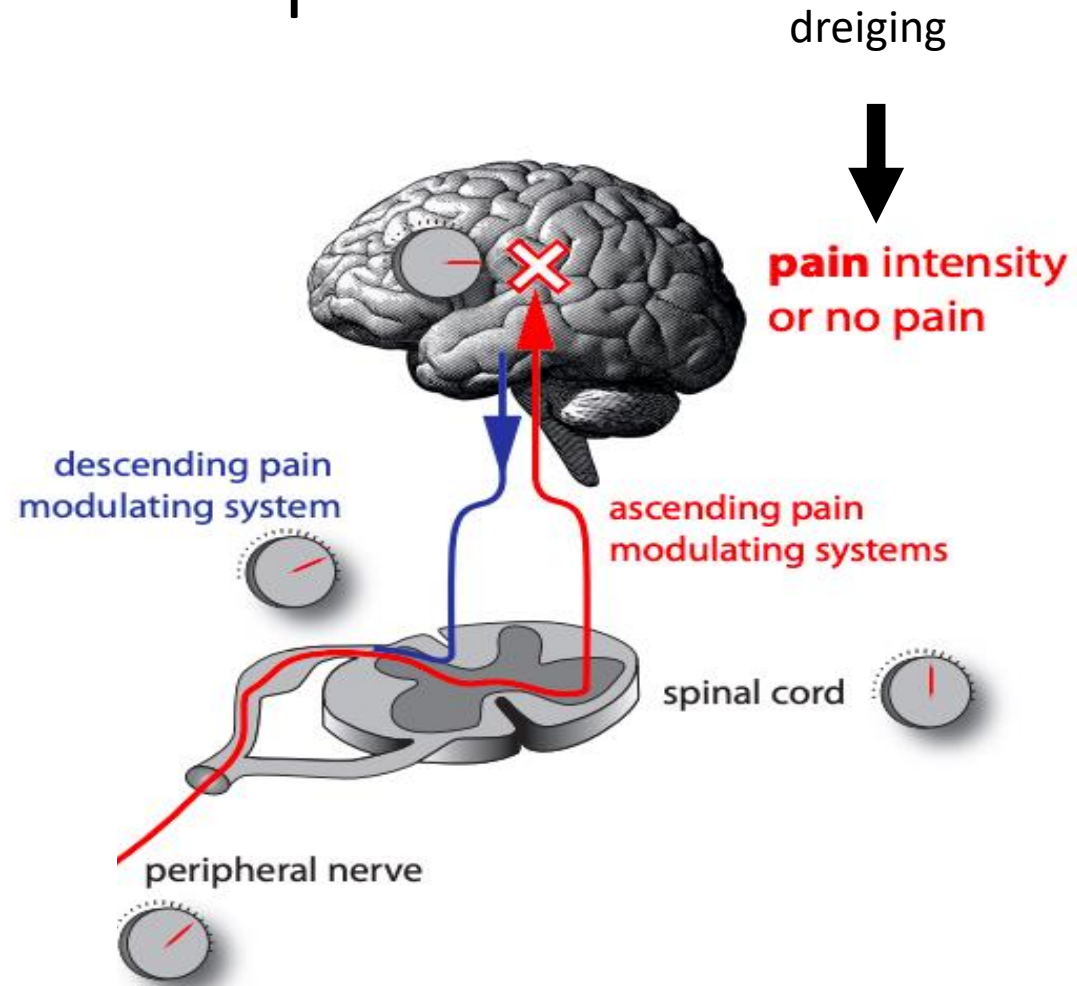
Pijn bij nociceptie



Gate control theory

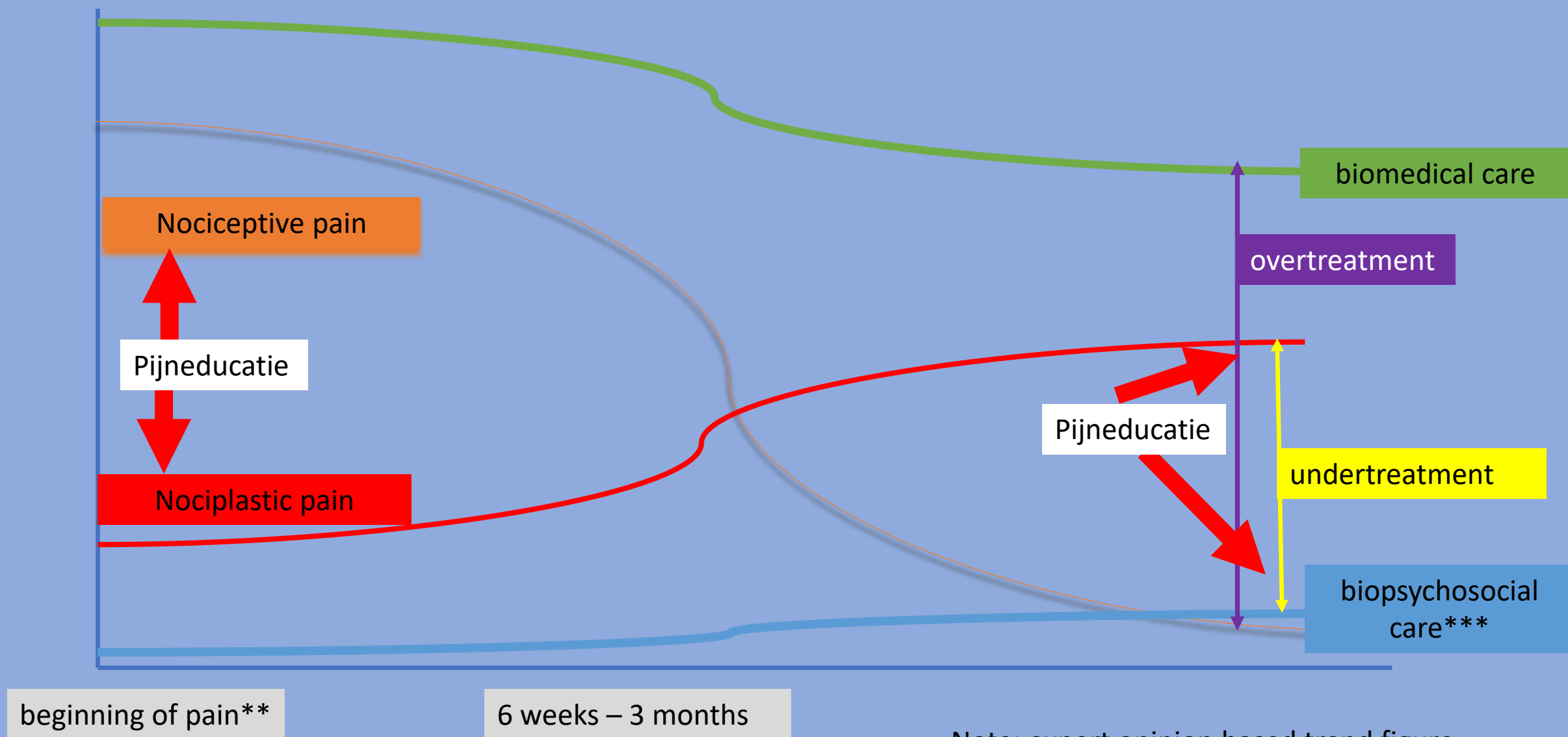


Pijn zonder nociceptie



Centrale sensitisatie

+neuropathic pain not included **excluded pain < 3 days ***multi –or transdisciplinary teams



Note: expert opinion based trend figure

Uitleg over
pijn bij een
patiënt met
schouderpijn
in de acute
fase?



Soms duidelijk (fractuur, FS (?),
laesie)



Soms oorzaak van de pijn
onduidelijk

Woorden en uitleg bij pijn

Peesontsteking
Ontsteking
Slecht houding
Overbelasting
Verkeerd belasten
Slijmbeurs ontsteking
Bursitis
Instabiliteit
Spierknopen
Schouder is een heel gevoelig gewicht

Wat als de pijn blijft bestaan *(3 maanden)*

Pijn neemt toe
Pijn neemt toe na behandeling
Behandeling is erg pijnlijk
Pijn verspreid zich
Andere klachten ontstaan

Wees
bewust van
de uitleg en
woorden die
je gebruikt!

Woorden, beelden
en kennis zijn
belangrijk voor het
lerende en
associërende
brein



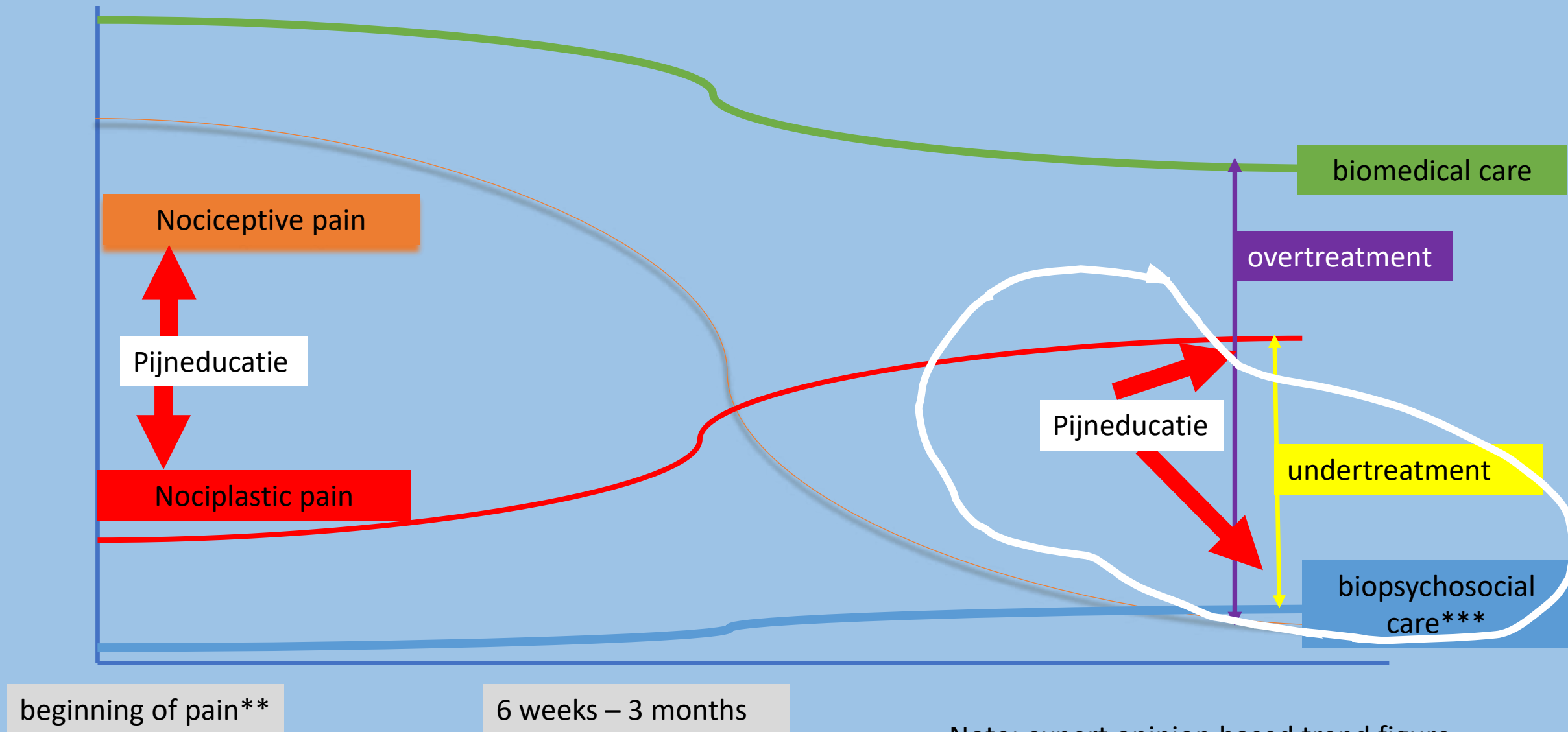
Kennis over het lichaam

Wees je bewust van je uitleg over pijn, is deze bedreigend (somatisch) of juist heel geruststellend?

Voorspellende brein, zal wel weer die bursitis zijn!

Blijvend verkeerd. Patienten blijven vaak volharden in somatische beschrijvingen van hun klachten!

+neuropathic pain not included **excluded pain < 3 days ***multi –or transdisciplinary teams



Note: expert opinion based trend figure

Wat is eigenlijk pijneducatie in de chronische fase??

- 1. Uitleg geven wat is pijn; hoe werkt het
 - Vooral bij centrale sensitisatie is dat belangrijk
 - Geen schade meer, het lichaam is niet aangedaan het pijnsysteem staat op scherp
 - Bespreekbaar maken van bestaande percepties
 - Overeenstemming (patiënt relationship)
- 2. **WAAROM** staat het pijnsysteem op scherp, hoe is de behandeling? Is het behandelbaar?



De vraag is weten we wat de oorzaak van pijn is bij schouderpijn

- Is er sprake van centrale sensitisatie?
- Wat is de oorzaak van tendinopathie?



Impingement syndrome in the shoulder has generally been considered to be a clinical condition of mechanical origin. However, anomalies exist between the pathology in the subacromial space and the degree of pain experienced. These may be explained by variations in the processing of nociceptive inputs between different patients. We investigated the evidence for augmented pain transmission (central sensitisation) in patients with impingement, and the relationship between pre-operative central sensitisation and the outcomes following arthroscopic subacromial decompression.

We recruited 17 patients with unilateral impingement of the shoulder and 17 age- and gender-matched controls, all of whom underwent quantitative sensory testing to detect thresholds for mechanical stimuli, distinctions between sharp and blunt punctate stimuli, and heat pain. Additionally Oxford shoulder scores to assess pain and function, and PainDETECT questionnaires to identify 'neuropathic' and referred symptoms were completed. Patients completed these questionnaires pre-operatively and three months post-operatively.

A significant proportion of patients awaiting subacromial decompression had referred pain radiating down the arm and had significant hyperalgesia to punctate stimulus of the skin compared with controls (unpaired *t*-test, $p < 0.0001$). These are felt to represent peripheral manifestations of augmented central pain processing (central sensitisation).

The presence of either hyperalgesia or referred pain pre-operatively resulted in a significantly worse outcome from decompression three months after surgery (unpaired *t*-test, $p = 0.04$ and $p = 0.005$, respectively).

These observations confirm the presence of central sensitisation in a proportion of patients with shoulder pain associated with impingement. Also, if patients had relatively high levels of central sensitisation pre-operatively, as indicated by higher levels of punctate hyperalgesia and/or referred pain, the outcome three months after subacromial decompression was significantly worse.

■ UPPER LIMB

Evidence that central sensitisation is present in patients with shoulder impingement syndrome and influences the outcome after surgery

S. E. Gwilym, H. C. L. Oag, I. Tracey, A. J. Carr



Diagnostiek

- CS?

CS?

Original article

People with musculoskeletal shoulder pain demonstrate no signs of altered pain processing

Melina N. Haik ^a ✉, Kerrie Evans ^{b, c} ✉, Ashley Smith ^b ✉, Luis Henríquez ^d ✉, Leanne Bisset ^b   

[Show more](#) 

Conclusion

People with shoulder pain demonstrated mechanical hypoalgesia, increased upper limb disability and poorer quality of life compared with healthy controls. Central sensitisation seems not be a characteristic of musculoskeletal shoulder pain although it could be present in a subgroup of patients.

Chronicity and recurrence in musculoskeletal shoulder pain are highly prevalent and can possibly be attributed to the concept of central sensitization. Available studies suggest a role for central sensitization in explaining chronic shoulder pain, but so far a comprehensive quantitative sensory testing (QST) protocol has not been used. The aim of this study was to gain knowledge on sensory processing and central pain modulatory mechanisms in patients suffering from chronic shoulder pain using such a QST protocol. Fifty study participants, including chronic shoulder pain patients and healthy controls, underwent a standardized, comprehensive psychophysical testing procedure. A static adapted QST protocol (including pressure algometry, vibration and mechanical detection) was applied. Thereafter, all subjects underwent dynamic measures of temporal summation and conditioned pain modulation. Questionnaires assessing psychosocial factors were completed by each subject. No significant differences ($P \geq .05$) were found between patients and controls based on pressure algometry, vibration detection, mechanical detection, temporal summation, and conditioned pain modulation. Moderate positive correlations ($r = .5$) were found between pressure pain thresholds (PPTs) and the amount of sports participation. Weak-to-moderate negative correlations ($r = -.3$ à $-.5$) were found between PPTs and psychosocial factors such as pain catastrophizing. Based on these findings, we can conclude that central sensitization is no characteristic feature in chronic musculo-skeletal shoulder pain but can be present in individual cases.

SCANDINAVIAN JOURNAL OF MEDICINE & SCIENCE IN SPORTS

ORIGINAL ARTICLE

Sensory processing and central pain modulation in patients with chronic shoulder pain: A case-control study

K. Kuppens ✉, G. Hans, N. Roussel, F. Struyf, E. Fransen, P. Cras, C. P. Van Wilgen, J. Nijs

[RESEARCH REPORT]

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BILL VICENZINO, PhD, MSc, Grad Dip Sports Phty, BPhy² • **C. PAUL VAN WILGEN**, PhD, MSc, PT³⁻⁵

Evidence of Nervous System Sensitization in Commonly Presenting and Persistent Painful Tendinopathies: A Systematic Review

Review > Pain Pract. 2017 Feb;17(2):267-280. doi: 10.1111/papr.12502. Epub 2016 Oct 14.

Central Pain Processing in Patients with Shoulder Pain: A Review of the Literature

Suzie Noten^{1 2}, Filip Struyf¹, Enrique Lluch^{2 3}, Marika D'Hoore¹, Eveline Van Looveren¹, Mira Meeus^{1 2 4}

Affiliations + expand

PMID: 27739242 DOI: [10.1111/papr.12502](https://doi.org/10.1111/papr.12502)

Meta-Analysis > Clin J Pain. 2021 Mar 1;37(3):237-248.

doi: [10.1097/AJP.0000000000000914](https://doi.org/10.1097/AJP.0000000000000914).

High Rate of Pain Sensitization in Musculoskeletal Shoulder Diseases: A Systematic Review and Meta-analysis

Davide Previtali¹, Vittorio Bordoni¹, Giuseppe Filardo^{1 2}, Paolo Marchettini^{3 4}, Enrico Guerra⁵, Christian Candrian^{1 6}

Affiliations + expand

PMID: 33399396 DOI: [10.1097/AJP.0000000000000914](https://doi.org/10.1097/AJP.0000000000000914)

Central sensitization

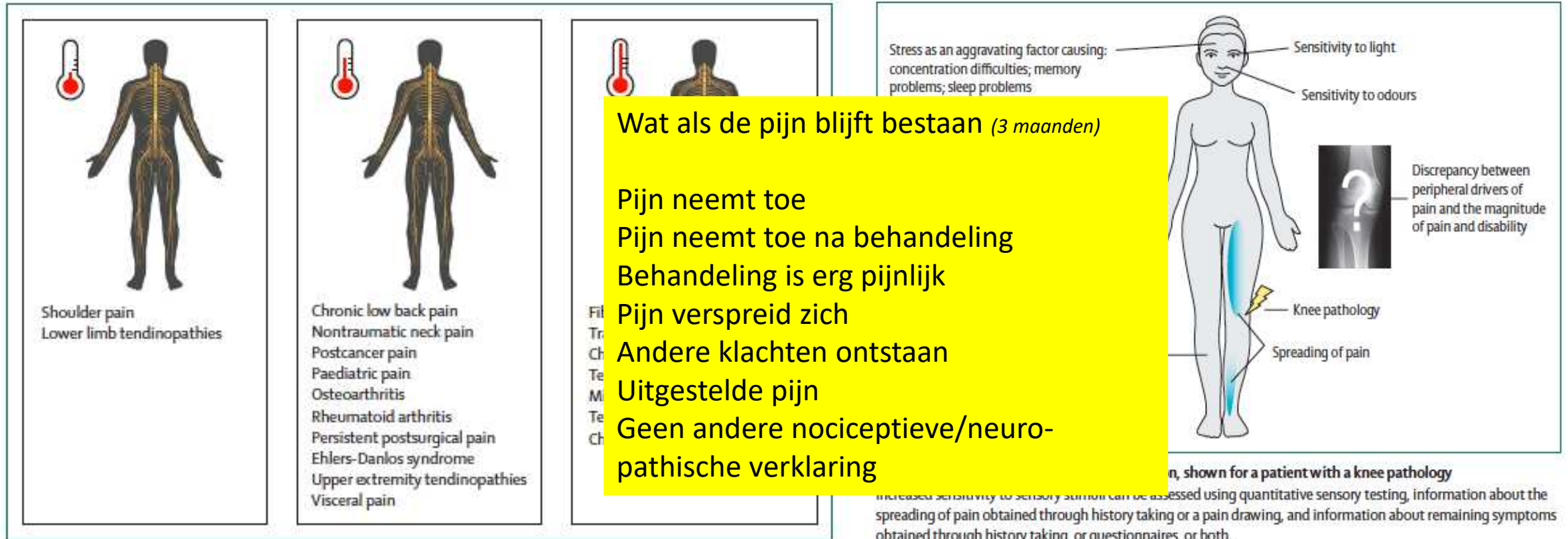


Figure 1: Medical diagnoses related to central sensitisation shown on the central sensitisation continuum
The height of the thermometer reading indicates the severity of central sensitisation.

Wat als de pijn blijft bestaan (3 maanden)

Pijn neemt toe

Pijn neemt toe na behandeling

Behandeling is erg pijnlijk

Pijn verspreid zich

Andere klachten ontstaan

Uitgestelde pijn

Geen andere nociceptieve/neuro-
pathische verklaring

Central sensitisation in chronic pain conditions: late
discoveries and their potential for precision medicine

Jo Nijs, Steven Z. George, Daniel J. Clauw, César Fernández-de-las-Peñas, Eva Kosek, Kelly Ickmans, Josué Fernández-Carnero, Andrea Polli, Eleni Kapreli, Eva Huysmans, Antonio I. Cuesta-Vargas, Ramakrishnan Mani, Mari Lundberg, Laurence Leysen, David Rice, Michele Sterling, Michele Curatolo

Stappen van behandeling inclusief pijneducatie



Stap 1:

1.
BIO-PSYCHO-SOCIALE
ANAMNESE

MATCHED CARE

Matched care model

Intake model: SCEGS

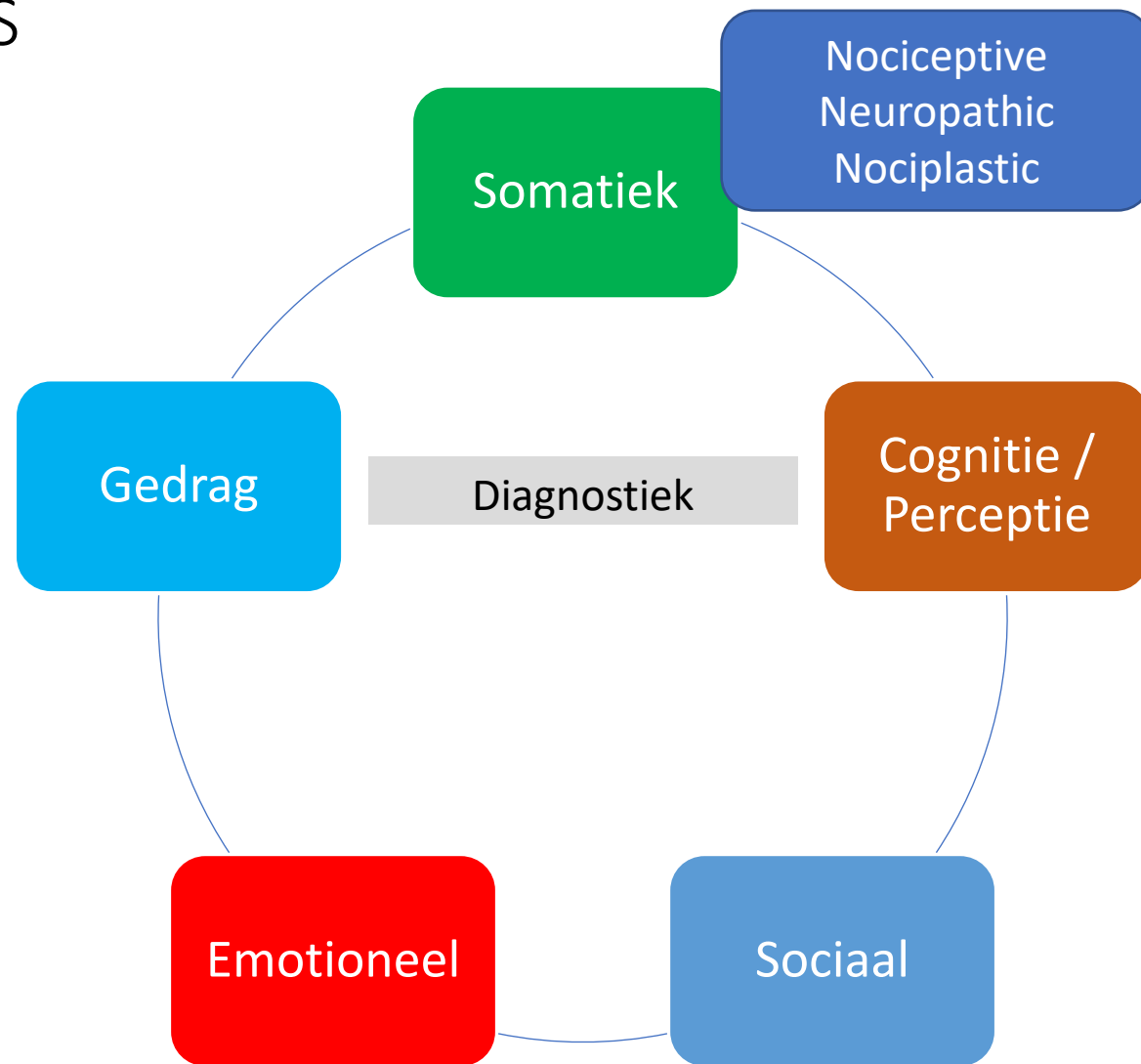


Arts /
fysiotherapeut

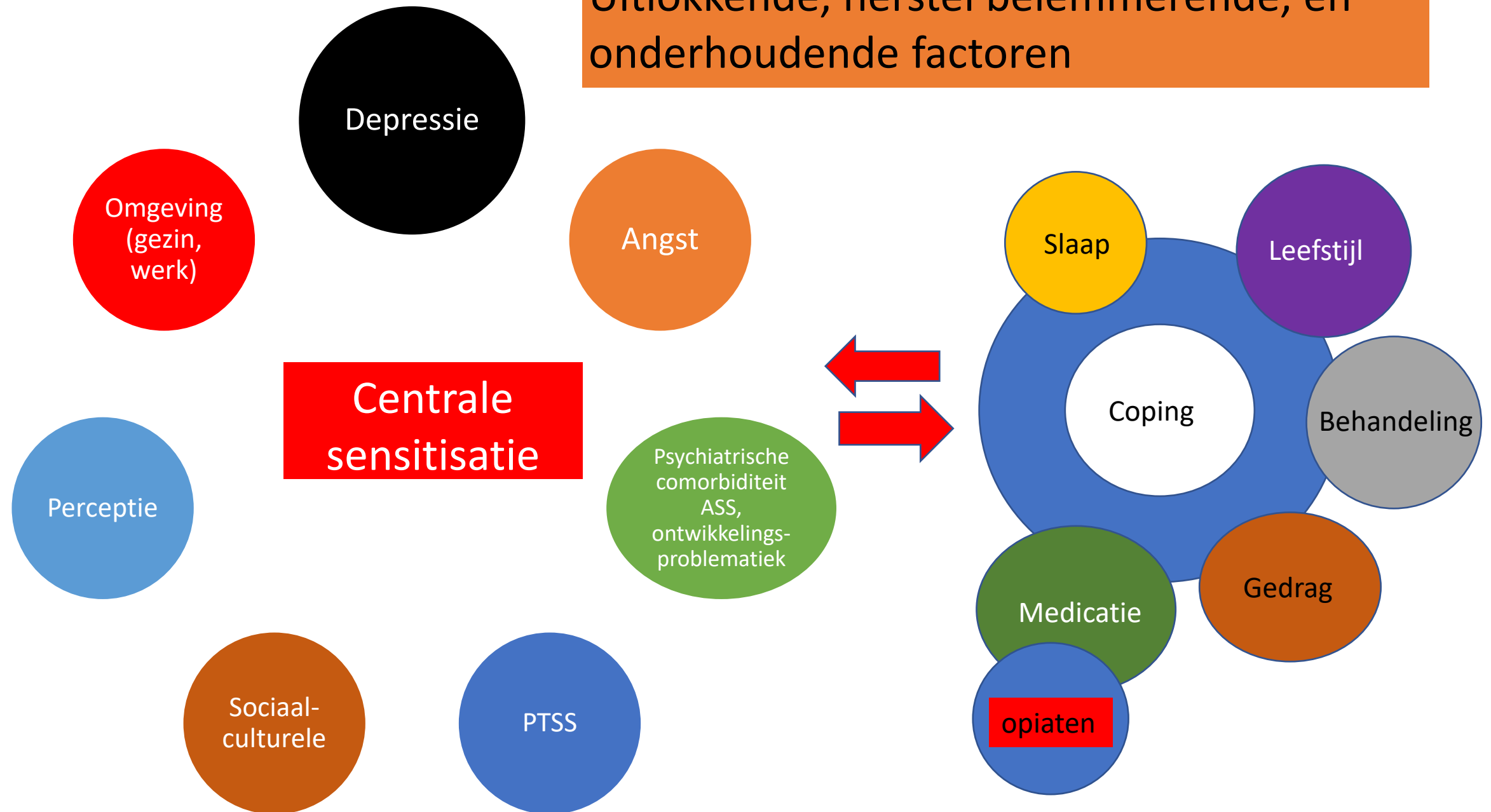
+



Psycholoog/
VS-GGZ



Uitlokkende, herstel belemmerende, en
onderhoudende factoren



Stap 2:

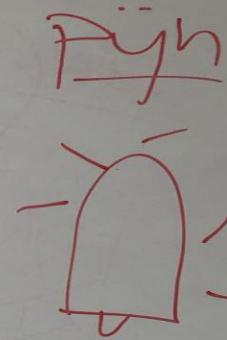
- PIJNEDUCATIE
- UITLEG EN OVEREENSTEMMING
- INTEGRALE DIAGNOSE

Beschrijvende diagnose

- Patient van 45 jaar, met nu 9 maanden bestaande schouderklachten, waarvoor geen lichamelijk verklaring (veel diagnostiek) verklaarbaar door centrale sensitisatie (neemt toe, wijdverspreid, bilateraal, hoge CSI). Er is sprake van sterke somatische percepties over pijn, met veel bewegingsangst (pees scheurt) daarbij chronische stress (werk en gezin) met slaapproblemen en opiaat gebruik. Steunend systeem en coöperatieve patiënt.

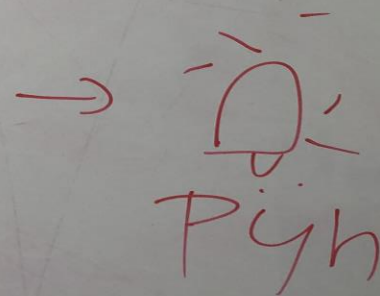
Acute pijn
(nociceptie)

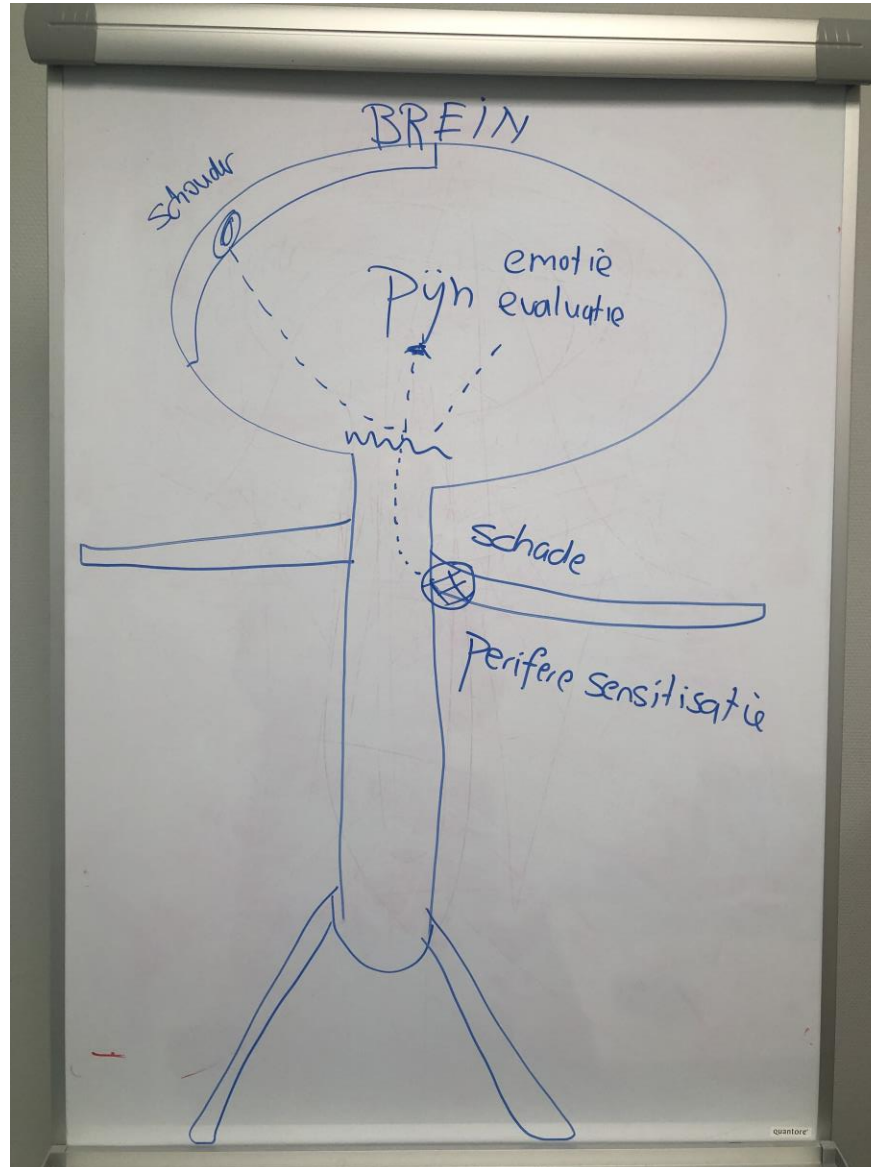
Schade
ontsteking

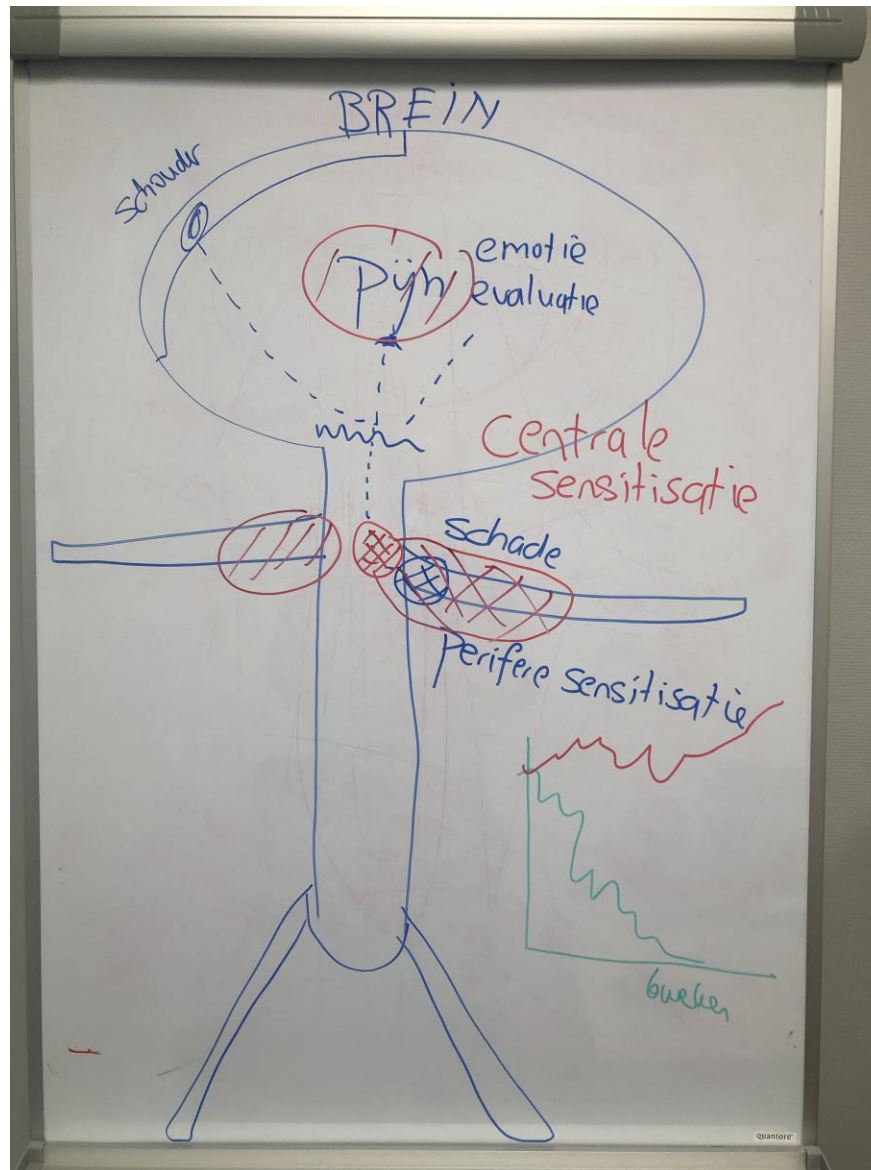


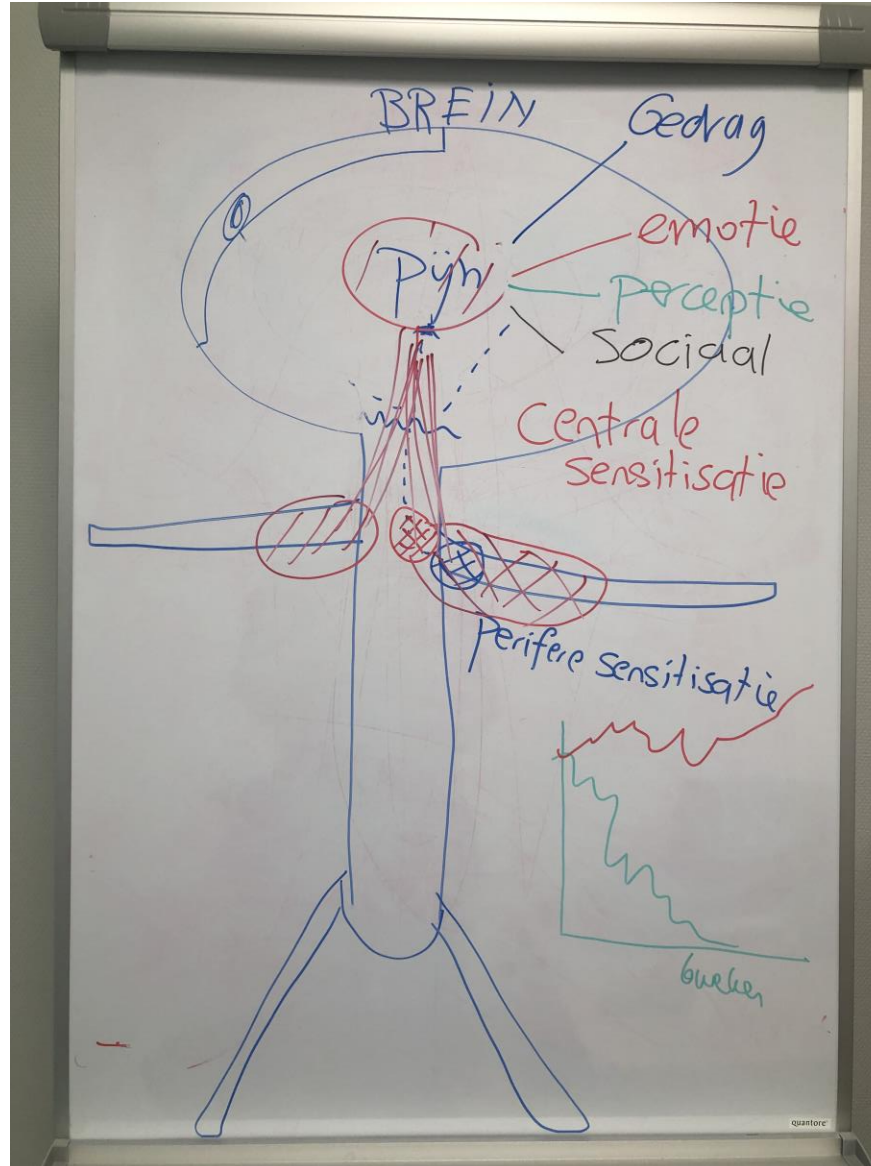
(20 %)

Chronische pijn →
complexe
neuroplastische









Stap 3:

- SHARED DECISION MAKING
- BEHANDELING WEL / NIET

STAP 4:

- MULTIDISCIPLINAIRE BEHANDELING (CGT)
- PIJNEDUCATIE
- VERDER BESPREKEN PERCEPTIES
- OPIATEN AFBOUWEN
- STRESS MANAGEMENT
- EXPOSURE (GRADED ACTIVITY)
- SLAAP HYGIENE

Take home from the neighbour



Kijk goed naar nociceptie of
nociplastische pijn



Wees bewust van de
woorden/uitleg die je gebruikt



Bij nociplastische pijn (CS) hanteer
biopsychosociaal model en leg uit
dat het pijn is zonder schade.

Dank voor uw aandacht



PAIN IN MOTION

www.paininmotion.be

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