Forstå smerter *anno 2024*

I samarbejde med TopDanmark og BetterHealth

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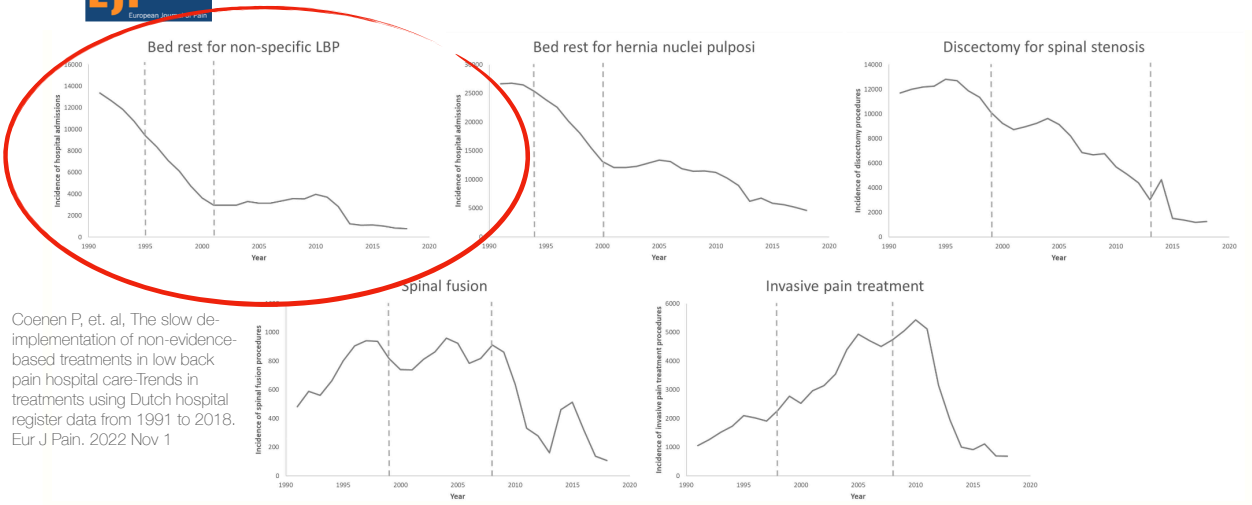
Hvilken **udvikling** er der sket **i** tilgangen til **behandlingen af smerter?**

(Hvad er holdningen til **medicin** i kombination med træning og hjælp til smertehåndtering/patientuddannelse?)



Coenen P, et. al, The slow de-implementation of non-evidence-based treatments in low back pain hospital care-Trends in treatments using Dutch hospital register data from 1991 to 2018. Eur J Pain. 2022 Nov 1

"A second **important driver for (de-)implementation is healthcare reimbursement**, in which clinicians are typically rewarded by volume and complex treatments rather than quality of care."

	Acute low back pain (<6 weeks)	Persistent low back pain (>12 weeks)
Education and self-care		
Advice to remain active	First-line treatment, consider for routine use	First-line treatment, consider for routine use
Education	First-line treatment, consider for routine use	First-line treatment, consider for routine use
Superficial heat	Second-line or adjunctive treatment option	Insufficient evidence
Non-pharmacological therapy		
Exercise therapy	Limited use in selected patients	First-line treatment, consider for routine use
Cognitive behavioural therapy	Limited use in selected patients	First-line treatment, consider for routine use
Spinal manipulation	Second-line or adjunctive treatment option	Second-line or adjunctive treatment option
Massage	Second-line or adjunctive treatment option	Second-line or adjunctive treatment option
Acupuncture	Second-line or adjunctive treatment option	Second-line or adjunctive treatment option
Yoga	Insufficient evidence	Second-line or adjunctive treatment option
Mindfulness-based stress reduction	Insufficient evidence	Second-line or adjunctive treatment option
Interdisciplinary rehabilitation	Insufficient evidence	Second-line or adjunctive treatment option
Pharmacological therapy		
Paracetamol	Not recommended	Not recommended
Non-steroidal anti-inflammatory drugs	Second-line or adjunctive treatment option	Second-line or adjunctive treatment option
Skeletal muscle relaxants	Limited use in selected patients	Insufficient evidence
Selective norepinephrine reuptake inhibitors	Insufficient evidence	Second-line or adjunctive treatment option
Antiseizure medications	Insufficient evidence	Role uncertain
Opioids	Limited use in selected patients, use with caution	Limited use in selected patients, use with caution
Systemic glucocorticoids	Not recommended	Not recommended
Interventional therapies		
Epidural glucocorticoid injection (for herniated disc with radiculopathy)	Not recommended	Limited use in selected patients
Surgery		
Discectomy (for herniated disc with radiculopathy)	Insufficient evidence	Second-line or adjunctive treatment option
Laminectomy (for symptomatic spinal stenosis)	Insufficient evidence	Second-line or adjunctive treatment option
Spinal fusion (for non-radicular low back pain with degenerative disc findings)	Insufficient evidence	Role uncertain

"Lancet-papers"

Low Back Pain | Lancet 2018

Key messages

- Low back pain is an extremely common symptom in populations worldwide and occurs in all age groups, from children to the elderly population
- Low back pain was responsible for 60·1 million disability-adjusted life-years in 2015, an increase of 54% since 1990, with the biggest increase seen in low-income and middle-income countries
- Disability from low back pain is highest in working age groups worldwide, which is especially concerning in low-income and middle-income countries where informal employment is common and possibilities for job modification are limited
- Most episodes of low back pain are short-lasting with little or no consequence, but recurrent episodes are common and low back pain is increasingly understood as a long-lasting condition with a variable course rather than episodes of unrelated occurrences
- Low back pain is a complex condition with multiple contributors to both the pain and associated disability, including psychological factors, social factors, biophysical factors, comorbidities, and pain-processing mechanisms
- For the vast majority of people with low back pain, it is currently not possible to accurately identify the specific nociceptive source
- Lifestyle factors, such as smoking, obesity, and low levels of physical activity, that relate to poorer general health, are also associated with occurrence of low back pain episodes

WHO guideline for non-surgical management of chronic primary low back pain in adults in primary and community care settings: Executive summary.ISBN 978-92-4-008555-8

WHO anbefalinger

Kroniske LBP i almen praksis

Overvej

- **Patientuddannelse** og rådgivning
- Struktureret **træning**sprogram
- Nålebehandling (akupunktur)
- **Manuel behandling** (massage og manipulation)
- Hjælp til at **øge funktion** (fx ergonomiske redskaber)
- **Adfærdsterapi**, inkl. CBT/ACT
- NSAID
- Chili-plastre
- Multidisciplinær behandling

Brug ikke (og ingen anbefaling)

- Non-farmakologisk: Traktion, ultralydsbehandling, TENS og lændebælter
- Kognitiv terapi, respondent terapi og MSBR
- Medicin: Opioider, SNRI, TCA, anticonvulsiva, relexantia, glucokortikosteroider, paracetamol, benzodiazepiner, cannabinoider, lokalbedøvelse,
- Urter: "djævlens klo", White willow, Brazilian arnica, ingefær, white lily, urteomslag
- Øvrige: Vægttab (farmakologisk og non-farmakologisk),

UGESKRIFT FOR LÆGER | Aktuelt | Videnskab | Debat

Debat

Tiden er kommet til at afskaffe opioider i behandling af patienter med akutte nakke- eller lænderygsmerter

Nyt studie fra Australien publiceret i The Lancet viser, at opioidbehandling til patienter med akutte nakke- eller lænderygsmerter ikke er bedre end placebo. Faktisk var der flere signifikante forskelle til fordel for placebo.

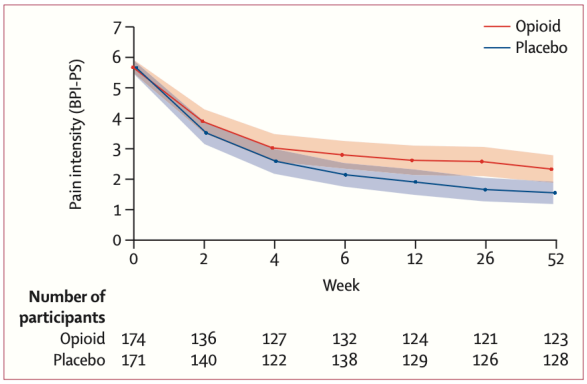
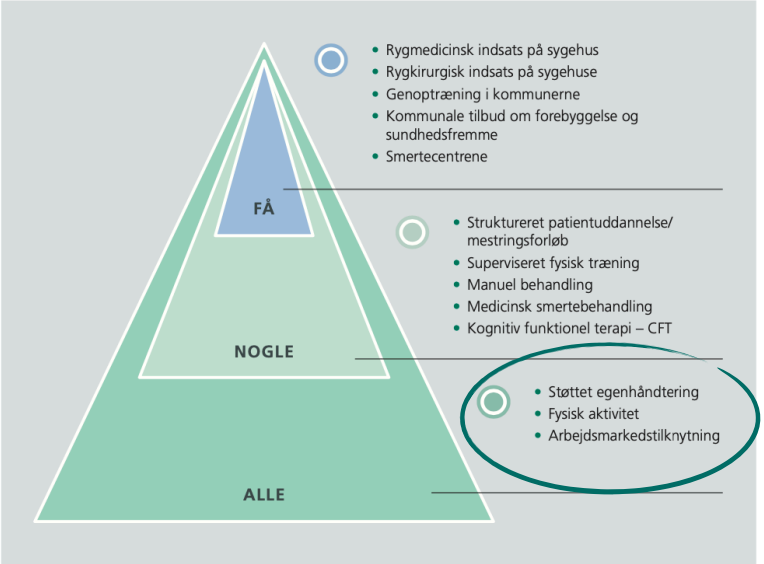


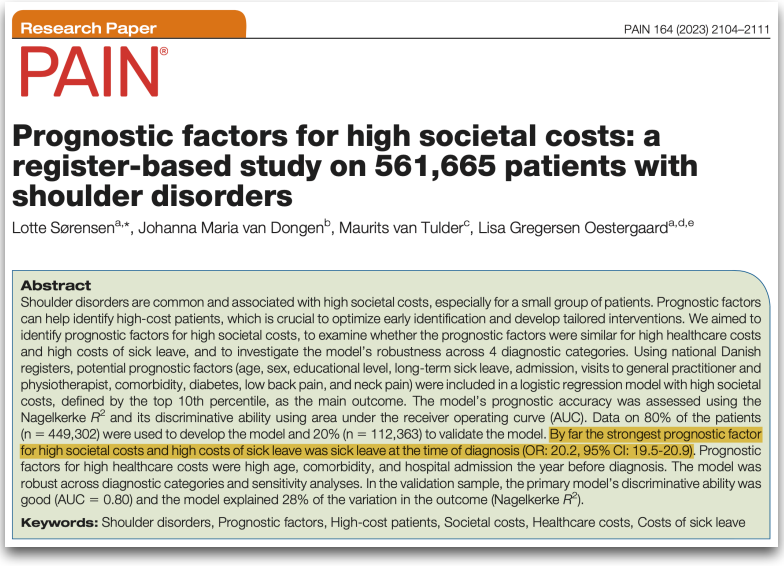
Figure 2: **Longitudinal plot of mean pain severity score**
Datapoints show mean scores at each timepoint, and the shaded areas show 95% CIs. Estimates are raw values (not modelled). BPI-PS=Brief Pain Inventory, pain severity subscale.

Jones CMP, Day RO, Koes BW, Latimer J, Maher CG, McLachlan AJ, Billot L, Shan S, Lin CC; OPAL Investigators Coordinators. Opioid analgesia for acute low back pain and neck pain (the OPAL trial): a randomised placebo-controlled trial. Lancet. 2023 Jul 22;402(10398):304-312

Eksempel (2024)



Arbejdsmarkedstilknytning!!!



Research Paper PAIN 164 (2023) 2104–2111

PAIN®

Prognostic factors for high societal costs: a register-based study on 561,665 patients with shoulder disorders

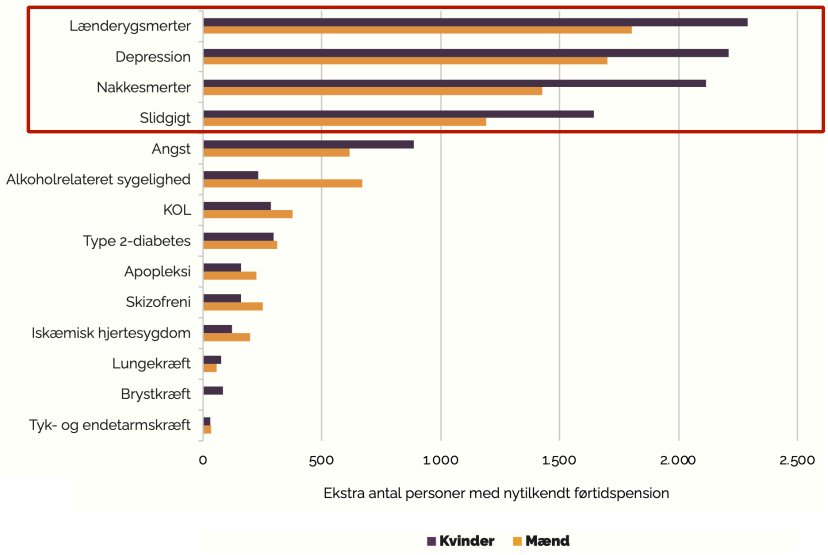
Lotte Sørensen[a,*], Johanna Maria van Dongen[b], Maurits van Tulder[c], Lisa Gregersen Oestergaard[a,d,e]

Abstract

Shoulder disorders are common and associated with high societal costs, especially for a small group of patients. Prognostic factors can help identify high-cost patients, which is crucial to optimize early identification and develop tailored interventions. We aimed to identify prognostic factors for high societal costs, to examine whether the prognostic factors were similar for high healthcare costs and high costs of sick leave, and to investigate the model's robustness across 4 diagnostic categories. Using national Danish registers, potential prognostic factors (age, sex, educational level, long-term sick leave, admission, visits to general practitioner and physiotherapist, comorbidity, diabetes, low back pain, and neck pain) were included in a logistic regression model with high societal costs, defined by the top 10th percentile, as the main outcome. The model's prognostic accuracy was assessed using the Nagelkerke R^2 and its discriminative ability using area under the receiver operating curve (AUC). Data on 80% of the patients (n = 449,302) were used to develop the model and 20% (n = 112,363) to validate the model. By far the strongest prognostic factor for high societal costs and high costs of sick leave was sick leave at the time of diagnosis (OR: 20.2, 95% CI: 19.5-20.9). Prognostic factors for high healthcare costs were high age, comorbidity, and hospital admission the year before diagnosis. The model was robust across diagnostic categories and sensitivity analyses. In the validation sample, the primary model's discriminative ability was good (AUC = 0.80) and the model explained 28% of the variation in the outcome (Nagelkerke R^2).

Keywords: Shoulder disorders, Prognostic factors, High-cost patients, Societal costs, Healthcare costs, Costs of sick leave

Figur 1.1.8 Ekstra antal personer med nytilkendt førtidspension blandt mænd og kvinder i alderen 16-64 år i Danmark med udvalgte sygdomme i forhold til en referencepopulation matchet på køn, alder, uddannelse og CCI. Årligt gennemsnit for perioden 2017-2018.

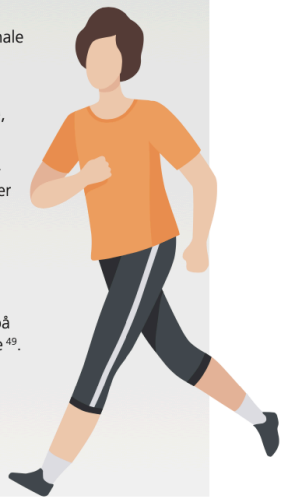


SYGDOMSBYRDEN I DANMARK – SYGDOMME © Sundhedsstyrelsen, 2022

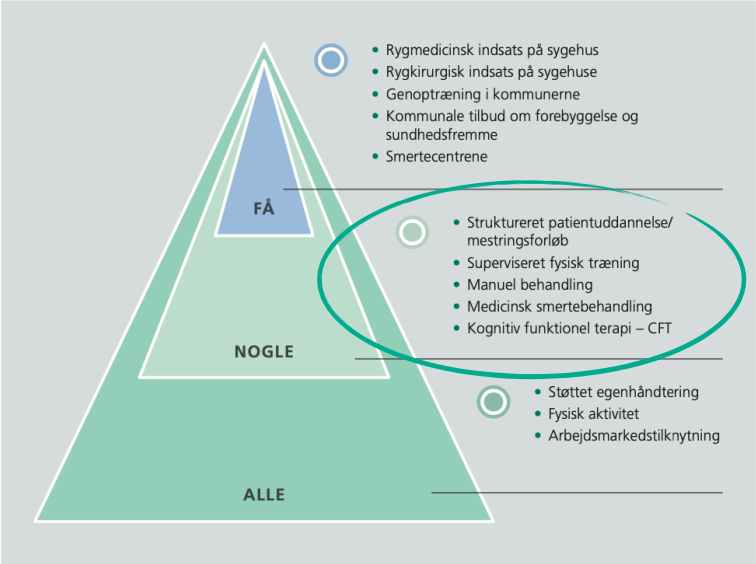
Fysisk aktivitet (og støttet egenhåndtering)

FAKTABOKS | Fysisk aktivitet

- Fysisk aktivitet for borgere med lænderygbesvær er anbefalet af nationale og internationale kliniske retningslinjer [52].
- Fysisk aktivitet for borgere med lænderygbesvær omfatter generel fysisk aktivitet og konditionstræning såvel som øvelser, der giver styrke, smidighed, kontrol og balance.
- Træning kan reducere smerter, forbedre funktion og forebygge lænderygbesvær hos borgere med episodisk eller vedvarende lænderygbesvær på samme niveau som andre anbefalede behandlinger som for eksempel manuel terapi [49].
- Effekten af træning på smerte og funktion er ikke store på gruppeniveau, men kan være store for den enkelte borger [49].
- Det er i dag ikke muligt at identificere borgere, der responderer godt på træning eller at fremhæve bestemte former for træning frem for andre [49].
- Effekten af træning er størst, når det er superviseret, kombineret med andre behandlinger og med kognitive tilgange [53, 54, 55].
- Fysisk aktivitet bør tilpasses, så borgerens fysiske udgangspunkt, forståelse, mentale forestillinger og følelser inddrages.



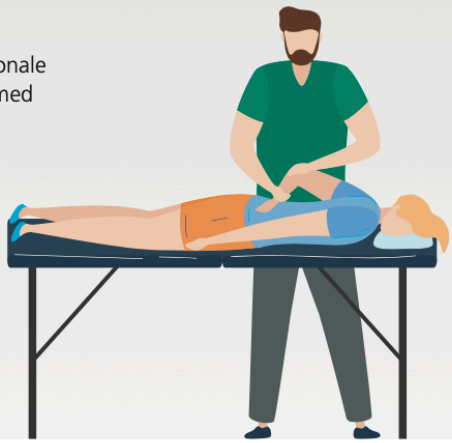
Eksempel (2024)



Manuel terapi

FAKTABOKS | Manuel behandling

- Manuel behandling anbefales i danske og internationale evidensbaserede kliniske retningslinjer for borgere med uspecifik lænderygbesvær uanset varighed [51, 60, 61].
- Der er evidens for, at manuel behandling kan reducere smerter og forbedre funktion hos borgere med vedvarende lænderygbesvær på samme niveau som andre anbefalede behandlinger for eksempel fysisk aktivitet [59].
- Manglende bedring efter 4-5 behandlinger indikerer, at yderligere manuel behandling sandsynligvis ikke vil medføre klinisk relevant bedring [62].



Medicinsk smertelindring

- I de senere år er evidens-baserede kliniske retningslinjer imidlertid ændret til ikke at anbefale disse behandlinger som førstelinjevalg hos borgere med lænderygbesvær. Dette skyldes manglende dokumentation for effekt eller dokumenteret meget lille effekt kombineret med risiko for alvorlige bivirkninger.
- Hvis man ønsker at anvende farmakologisk behandling for muskuloskeletale smerter anbefaler Sundhedsstyrelsen ved episodiske smerter Paracetamol, NSAID eller opioider i kort tid (dage eller få uger), mens man ved vedvarende smerter kun anbefaler medicinsk smertebehandling i særlige tilfælde uanset præparat [63, 51, 64].

FAKTABOKS
Medicinsk smertebehandling

- Medicinsk smertebehandling af lænderygbesvær omfatter primært Paracetamol, NSAID, Gabapentin eller opioider. Disse har traditionelt været meget anvendte til behandling af lænderygbesvær i Danmark.
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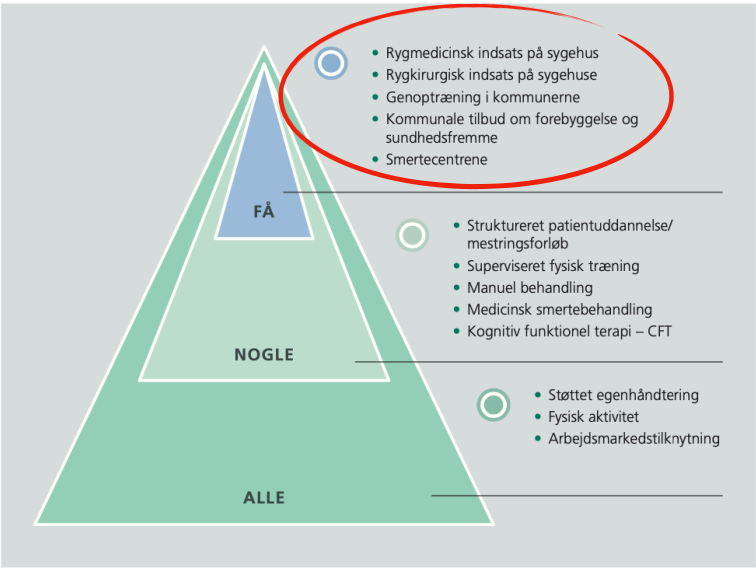
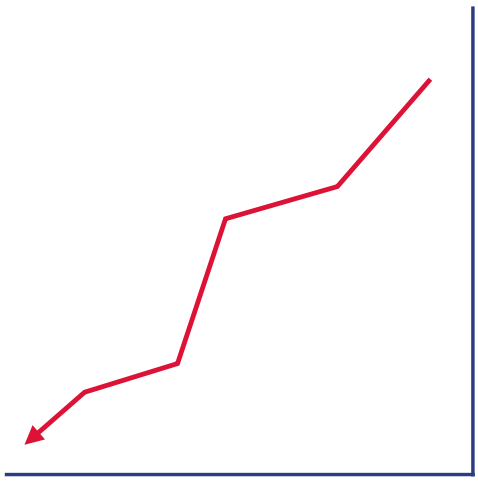


Er der noget, vi kan være opmærksomme på, ved vores første kontakt med skadelidte i forhold til om de er i **risiko for at udvikle langvarige smerter?**

PREDIKTORER FOR DÅRLIGT FUNKTIONELT OUTCOME

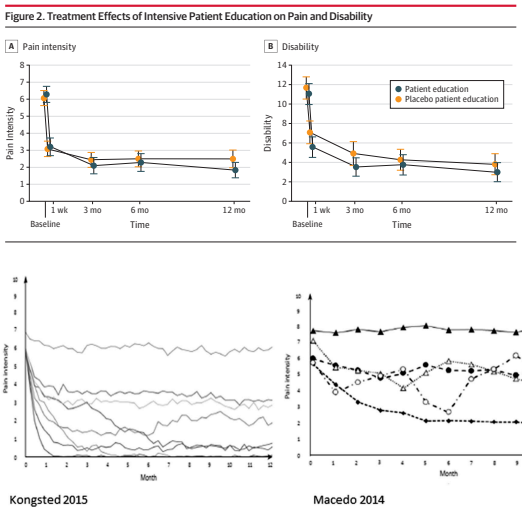
- STÆRK evidens viser at dårligt outcome kan prediktere af:
  - Dårlig baseline funktion/disability eller dårligt mentalt helbred
  - Høj smerte
  - Flere co-morbiditeter
  - Højere alder
  - Højere body mass index (BMI)
- MODERAT evidens viser, at dårligt outcome er forbundet med:
  - **Længere varighed af symptomer**
  - Høj score på fear avoidance/catastrophizing scale
  - Igangværende arbejdsskadesag
  - Langvarig sygeorlov/-melding
  - Lavt uddannelsesniveau
  - Dårligt generelt helbred



Burgess R, Mansell G, Bishop A, Lewis M, Hill J. Predictors of functional outcome in musculoskeletal healthcare: An umbrella review. Eur J Pain. 2020;24:51–70

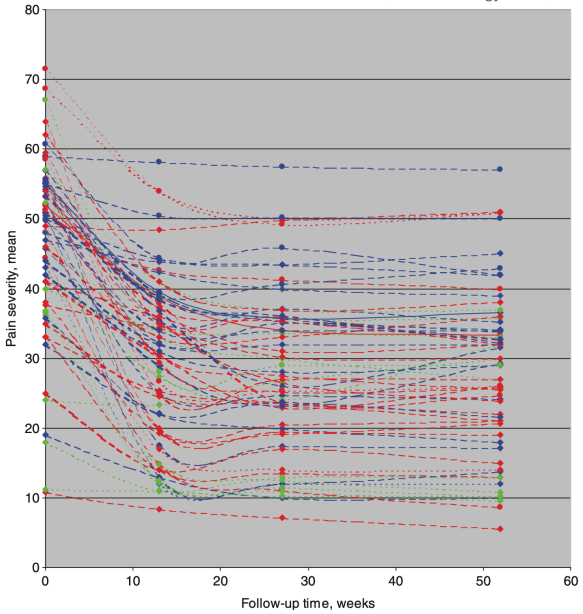
Hvor hurtigt er det relevant at henvise skadelidte **til et smertehåndteringsforløb**, **og** kan patientuddannelse være med til at **mindske risikoen for** udvikling af **kroniske smerter?**

Behandling af
USPECIFIKKE LÆNDERYGSMERTER



Kongsted 2015 Macedo 2014

Kongsted et al. BMC Musculoskeletal Disorders (2016) 17:220
Traeger AC, et al. JAMA Neurol. 2019 Feb 1;76(2)
Artus et al., Rheumatology 2010;49



Smerter (flere typer) i mere end 6 måneder

8 follow-ups over 4 years

N = 1.905

Pain > 6/10 months at baseline

- "fluctuating" (n = 586 [31%]),
- "persistent mild" (n = 449 [24%]),
- "persistent moderate" (n = 414 [22%]),
- "persistent severe" (n = 251 [13%]),
- **"gradual improvement" (n = 205 [11%]).**

Glette M, Stiles TC, Borchgrevink PC, Landmark T. The Natural Course of Chronic Pain in a General Population: Stability and Change in an Eight-Wave Longitudinal Study Over Four Years (the HUNT Pain Study). J Pain. 2020 May-Jun;21(5-6):689-699

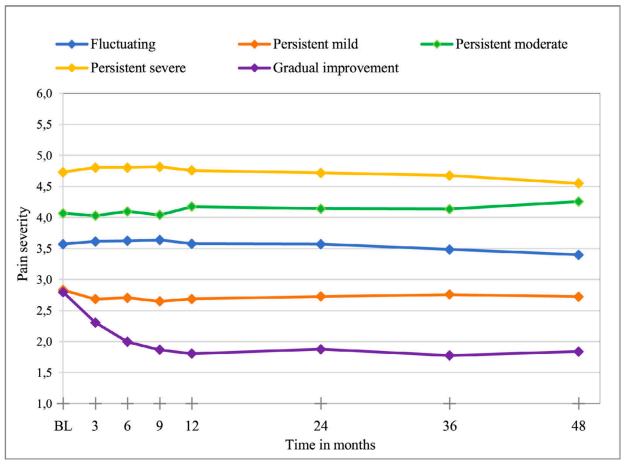


Figure 2. Average pain intensity values for all the 5 trajectory groups identified over all 8 follow-up time points.

Tid-vs-**prognose** for "wait-and-see" for uspecifikke smerter i bevægeapparatet

Livsstil, herunder især regelmæssig fysisk aktivitet, bør indgå på alle tidspunkter/i alle forløb!

Er der **forskel på** behandling af **akutte** smerter efter en skade **og** langvarige **kroniske smerter?**

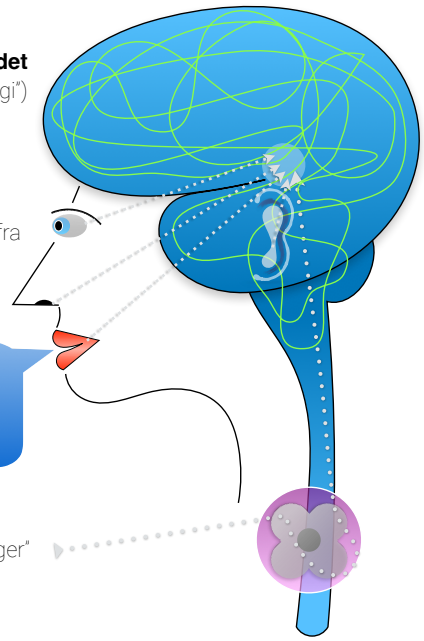
Nervesystemet og smerte

De sensoriske input bliver **bearbejdet** og bevidsthed opstår ("magi")

Samtidig får hjernen informationer fra **alle vores sanser** om konteksten

Men SMERTE bliver altid oplevet af et helt menneske!

Nociception er den perfekte "Smerte-trigger"



Akut smerte

Gør ondt!!!

Føles lidt som sidst…

Jeg burde nok træne noget mere?

Jeg er sikkert nedslidt!

Kroniske Smerter

Det gør ondt..!

Burde jeg ikke være bekymret?

Hvad gør jeg forkert (siden smerten ikke går væk)?!

Véd lægen/terapeuten overhovedet hvad jeg fejler??

Mon det går væk igen?

De tror sikkert ikke på mig :-(

Jeg skulle aldrig have…

Jeg vil ALDRIG igen…

Være aktiv? Hvordan???

Det sidder i min [væv]!

Tænk mindre på hvad du ved om smerten

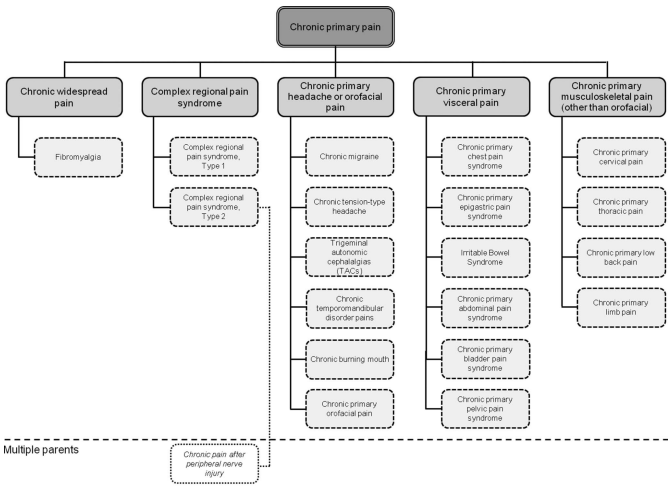
…forstå hvordan den påvirker forsikringstageren!

ICD-11 | *Kroniske Primære Smerter*

Kroniske smerter er en sygdom

Kroniske **primære** smerter er defineret som

- smerter i én eller flere regioner, der
- er vedvarende eller gentagne i **mere end 3 måneder** OG
- er **forbundet med signifikant emotionel distress eller funktionelle begrænsninger**, der påvirker ADL eller sociale roller, samt
- ikke kan forklares med en anden kronisk tilstand



ICD-11 / *Kroniske Sekundære Smerter*

Kroniske smerter er en sygdom

Vi skaber mening med sygdom - også når der ingen er!

- **Identitet**
  - "Hvad tror du, at det er?"
- **Årsag**
  - "Hvad tror du årsagen til dine problemer er?"
- **Tidslinje**
  - "Hvor længe tror du, at det vil vare ved?"
- **Konsekvenser**
  - "Hvad tror du vil ske som følge af dine smerter/lidelser?"
- **Helbredelse / kontrol**
  - "Hvad tror du vil gøre dig/det bedre?"

Petrie, K.J., Weinman, J., 2006

Saji IM, et al. Unintended consequences: quantifying the benefits, iatrogenic harms and downstream cascade costs of musculoskeletal MRI in UK **primary care**. BMJ Open Quality 2021;**10**:e001287.

MR-skanning

Normale fund leder til over- og fejldiagnostik

Table 1 Expected age or activity related epidemiological findings in musculoskeletal MRI

Body part	Prevalence
Neck	Up to 87% of asymptomatic individuals may have bulging discs,[107] with 58% of younger, asymptomatic athletes showing cervical disc degeneration.[108]
Shoulder	60% of asymptomatic older adults show subacromial bursitis on MRI and around half have rotator cuff tears,[109 110] whilst up to 72% of middle-aged individuals have asymptomatic superior labral tears.[111] In younger, asymptomatic athletes, 65% can have rotator cuff tears and 88% rotator cuff tendinosis.[112] 52% of pre-teen athletes demonstrate asymptomatic activity-related 'abnormal' shoulder MRIs.[113] With the exception of large rotator cuff tears, systematic review suggests little-to-no correlation between shoulder imaging findings and shoulder symptoms.[28 114]
Low back	At age 60, 88% of asymptomatic adults will have disc degeneration, 70% will show disc bulges, 50% will show facet degeneration and 23% spondylolisthesis.[115] Lumbar stenosis is seen in upto 20% of those under the age of 40.[116] Moderate or severe spinal stenosis is seen in up to 64% of those in their 50s and 93% in those in their 80s. The majority are asymptomatic, as only 17.5% of those with severe central stenosis may have symptoms.[117] In younger, asymptomatic adolescent sports players, up to 85% may show MRI changes including disc bulges, facet arthropathy as well as pars lesions.[118] Even 22% of asymptomatic children can show disc degeneration on MRI.[119]
Hip	Labral tears are seen in up to 69% of asymptomatic adults,[120] or even 89% of asymptomatic athletes[121] and labral cysts in 50% of dancers.[122] Acetabular dysplasia is seen in around 15% of asymptomatic people, with bilaterality in up to 39.5% of cases.[123 124] Cartilage defects may be seen in 12% of asymptomatic individuals.[125]
Knee	The majority of people with meniscal tears have no recent symptoms.[126] Meniscal tears are seen in around a third of middle-aged asymptomatic individuals, where 97% of knees will show incidental 'abnormalities', including bucket-handle tears.[127] Above the age of 40, MRI shows osteoarthritis features in up to 43% of asymptomatic individuals[128]
Ankle and Foot	Tibial stress fractures have been seen in 41% of asymptomatic runners.[129] In ankle MRI of asymptomatic amateur marathon runners, up to 80% may show tendon changes, 48% ligament injuries and 27% achilles tendinopathy.[130] Up to 37% of people may have incidental 'abnormal' anterior talofibular ligaments.[131 132] Achilles tendon changes may be seen in up to 63% of asymptomatic individuals, and retrocalcaneal bursal changes in 68% of runners.[133] Morton Neuroma's is present in 26%–33% of asymptomatic individuals.[134 135]

- 5% var indikeret
- 16% fik relevant behandling først
- 1% af skanningerne fik betydning for behandlingen
- **65% modtog** efterfølgende **ineffektive, skadelige eller unødvendige undersøgelser** som følge af fejl- og overdiagnostik

Negative konsekvenser af tidlig MR-skanning

RESEARCH Open Access

The association between early MRI and length of disability in acute lower back pain: a systematic review and narrative synthesis

Bara A. Shraim[1], Muath A. Shraim[2], Ayman R. Ibrahim[1], Mohamed E. Elgamal[1], Basem Al-Omari[3,4] and Mujahed Shraim[5*]

Abstract

Background: Clinical guideline recommendations are against early magnetic resonance imaging (eMRI) within the first 4 to 6 weeks of conservative management of acute low back pain (LBP) without "clinical suspicion" of serious underlying conditions (red flags). There is some limited evidence that a significant proportion of patients with LBP receive eMRI non- indicated by clinical guidelines, which could be associated with increased length of disability (LOD). The aim of this systematic review was to investigate whether eMRI for acute LBP without red flags is associated with increased LOD. The LOD was defined as the number of disability days (absence from work).

Methods: Medline, EMBASE, and CINAHL bibliographic databases were searched from inception until June 5, 2021. Two reviewers independently assessed the methodological quality of included studies using the Newcastle–Ottawa scale and extracted data for the review. The search identified 324 records, in which seven studies met the inclusion criteria. Three of the included studies used the same study population. Owing to between-study heterogeneity, a narrative synthesis of results was used.

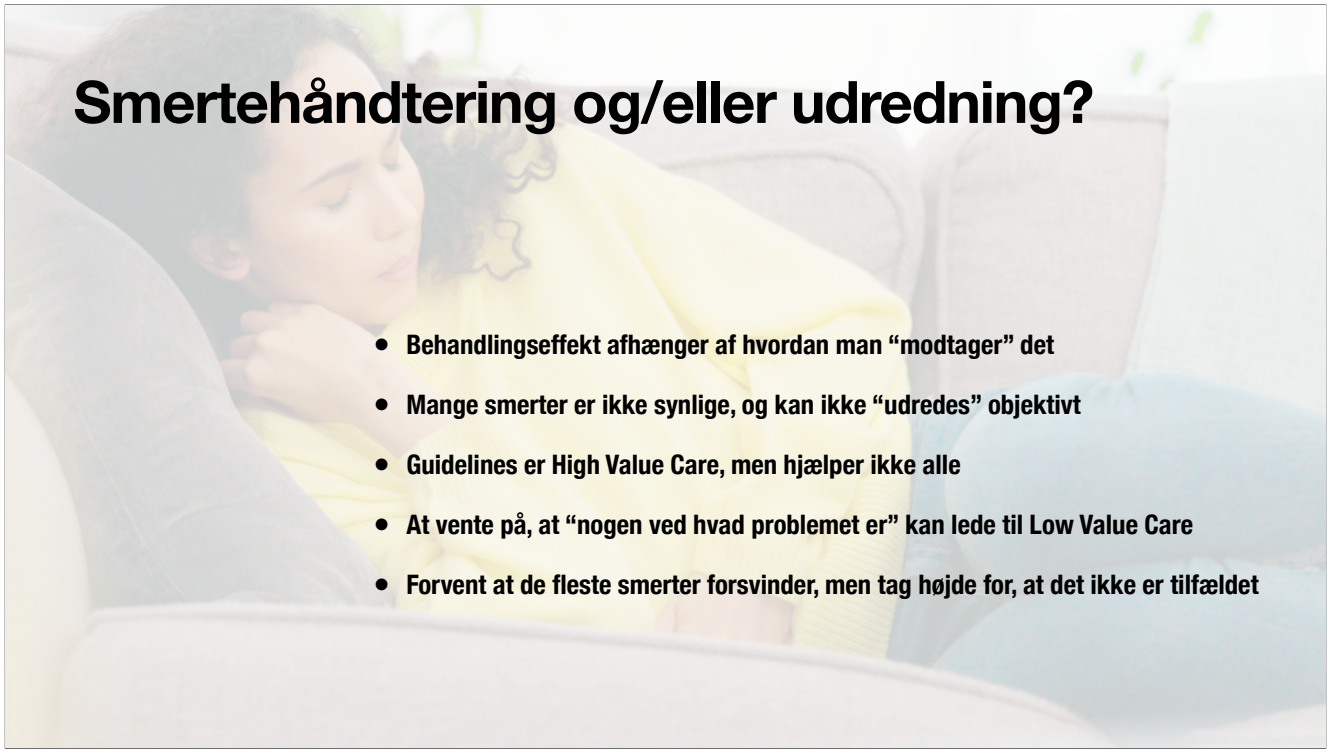
Results: All included studies were of good methodological quality and consistently reported that patients with acute LBP without red flags who received eMRI had increased LOD compared to those who did not receive eMRI. Three retrospective cohort studies reported that the eMRI groups had a higher mean LOD than the no eMRI groups ranging from 9.4 days (95% CI 8.5, 10.2) to 13.7 days (95% CI 13.0, 14.5) at the end of 1-year follow-up period. The remaining studies reported that the eMRI groups had a higher hazard ratio of work disability ranging between 1.75 (95% CI 1.23, 2.50) and 3.57 (95% CI 2.33, 5.56) as compared to the no eMRI groups.

Conclusion: eMRI is associated with increased LOD in patients with acute LBP without red flags. Identifying reasons for performing non-indicated eMRI and addressing them with quality improvement interventions may improve adherence to clinical guidelines and improve disability outcomes among patients with LBP.

Keywords: Systematic review, Magnetic resonance imaging, Low back pain, Sick leave, Work disability, Return to work

Shraim et al. BMC Musculoskeletal Disorders (2021) 22:983

Smertehåndtering og/eller udredning?



- **Behandlingseffekt afhænger af hvordan man "modtager" det**
- **Mange smerter er ikke synlige, og kan ikke "udredes" objektivt**
- **Guidelines er High Value Care, men hjælper ikke alle**
- **At vente på, at "nogen ved hvad problemet er" kan lede til Low Value Care**
- **Forvent at de fleste smerter forsvinder, men tag højde for, at det ikke er tilfældet**

Hvilke elementer indeholder **patientuddannelsen** i smerter?

Ondt i ryggen - det må du lære a
Sygt nok — 5. marts 2021

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Find links til interviews m.v. på linktr.ee

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